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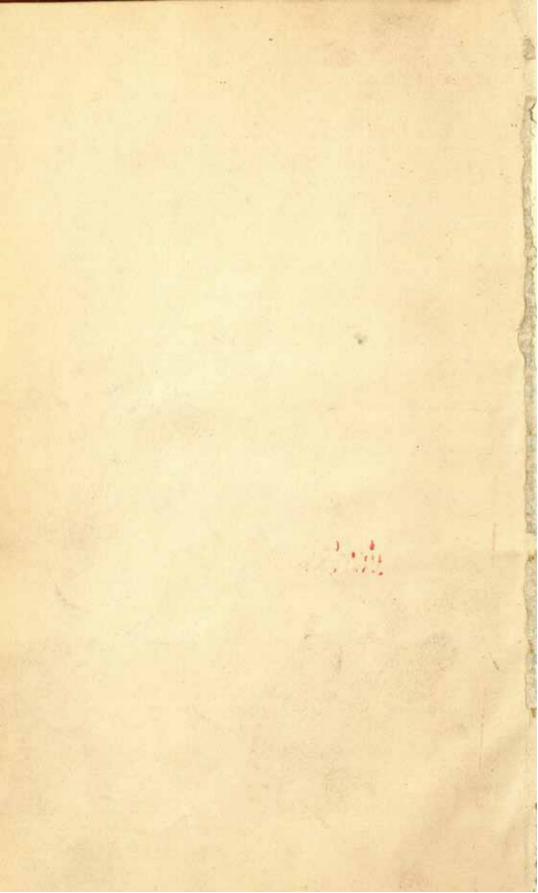
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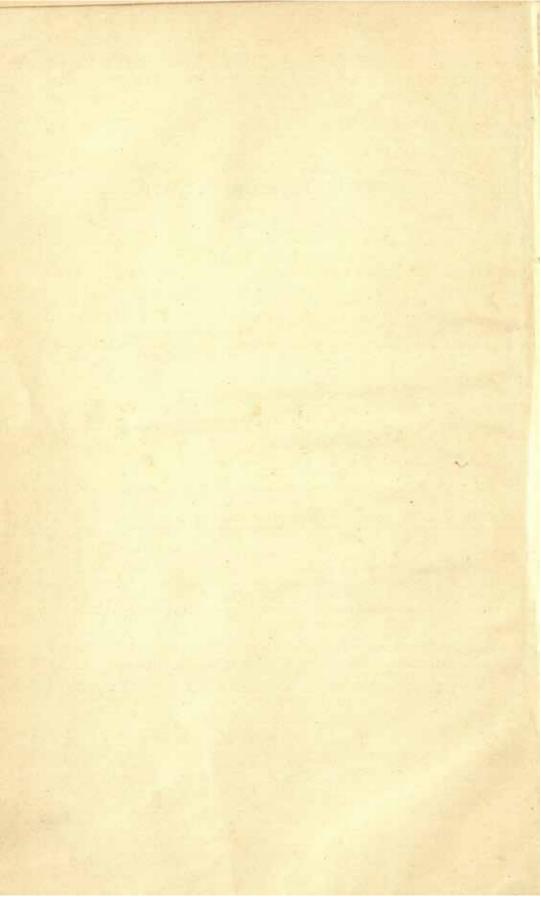
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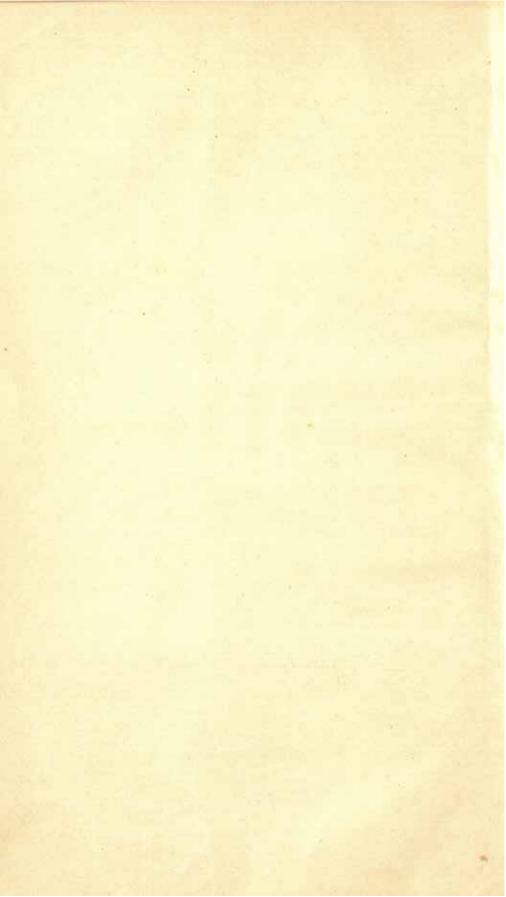


FOREWORD.

It is a happy event in the history of the Numismatic Society to be able to record its Silver Jubilee. The idea of celebrating this with a special Supplement was widely approved and the response to the appeal was quite good. Unforeseen events have, however, delayed the appearance of this volume, and the President craves the indulgence of the members, who have been waiting for its appearance for over two years. Our thanks are due to the authors of the papers as well as to the two numismatists who have presented a resumé of the work done by the Society during the last 25 years.

K. N. Dikshit, President, Numismatic Society of India.

Simla, 30th April, 1938.



NUMISMATIC SUPPLEMENT No. XLVII

Silver Jubilee Number

ARTICLES 341-350

Continued from 'Journal Royal Asiatic Society of Bengal, Letters,' Vol. II, 1936, No. 3.

341. A RESUMÉ OF NUMISMATIC RESEARCH IN INDIA.

With the close of the year 1935 the Numismatic Society of India completed 25 years of its existence. At its meeting held at Mysore that year it was decided that the next supplement be issued as the Jubilee number of the Society wherein it was proposed to publish the articles specially received for the occasion along with a short review of the work done by the Society during the last twenty-five years. A detailed bibliography of the original work done by different Numismatists has been published in Numismatic Supplements Nos. 41 and 43. It is, therefore, proposed to give a general resumé of the work done in India hitherto, regarding the old coinage of the country.

The history of Numismatic studies in India goes back to the year 1824 when, in the transactions of Royal Asiatic Society, Col. Todd published a Memoir on Greek, Parthian and Indian medals, wherein for the first time, he noticed the coins of Apollodotus and Menander. A find of coins of the sultans of Bengal in 1841 brought the issues of the Islamic rulers of India to the

notice of scholars.

In the latter half of the 19th century, Cunningham, Theobald and Bhagwanlal Indraji were the giants of the Numismatic world. Hoard after hoard of ancient, mediæval and Muhammadan coins surrendered its secrets to these veterans, whose publications display them to the best advantage of contemporary and later scholars. They were succeeded by Vincent Smith, Lane Poole, Edward Thomas, E. J. Rapson, C. J. Rodgers, Elliot, Hoernle, Thurston and others who, through their own collections or publications advanced this study to a considerable extent and created a keen interest for coin collecting and Numismatic research. The Catalogues of Coins in the British Museum (London), Indian Museum (Calcutta), the Central Museum (Lahore) and the Government Museum at Madras along with a series of learned articles and notices of coins and coin types in the pages of the Proceedings and Journals of the Asiatic

Society of Bengal and other scientific Journals shed a flood of light on the different classes of Indian coins. This formed a very strong foundation for the structure of further Numismatic research. In the beginning of the present century, there sprung up a class of Numismatists who were not only very keen collectors of coins and ardent students of Numismatics. but were also keen on the co-ordination of the results of these researches and on systematizing the studies by affording a common platform for bringing together collectors and students

of Indian Numismatics.

With this end in view the six founders of this Society, viz. Hon. Mr. (Now Sir) Richard Burn, I.C.S., H. R. Nevill, Esqr., I.C.S., R. B. Whitehead, Esqr., I.C.S., the Hon. Mr. H. N. Wright, I.C.S., Mr. Framji Thanawala, and Rev. Dr. Geo. P. Taylor, D.D. met together for the first time at Allahabad on the 28th of December 1910 and brought into being a Society called 'The Numismatic Society of India' and invited Sir John Stanley, the Chief Justice of Allahabad to be the first President of the Society. The annual fee for membership was fixed at Rs. 5. Early in 1911 an appeal was issued by Whitehead as the Honorary Secretary, wherein he stated 'Coin collecting in India up to the present has proceeded in a haphazard manner. A great deal has been done and is being done by Government and private collectors, but all has been independent of each other and there has been no means of co-ordinating the results which has undoubtedly been attended with wasted efforts and loss.' With these opening words he sent round a prospectus informing all concerned with the collection and study of coins, about the constitution of the Society intended not only for the encouragement and advancement of studies in Indian Numismatics, but also for the co-ordination and promotion of researches in that direction with a view to regulate the studies and achieve a systematized promotion of the knowledge. Indian coin collectors were invited to join the Society with a view to obtain references to books for reading of the coins they may have picked up and to have a general information on the subject. It was also suggested that Numismatists abroad may do well to keep in touch with modern developments in Indian Numismatics by joining the Society. This resulted in the rallying of as many as 46 members round the standard of the Society in the very first year of its inception. Its popularity increased and its membership grew steadily in the succeeding years. By the end of the first five years the Society had on its roll some 150 members including some in England, America, Russia, Austria, Holland, Singapur and Cevlon,

In the earlier years the Society seems to have taken a very keen interest in the preparation of the lists or catalogues of collections lying in various museums and with the private collectors. The original members took upon themselves to

prepare the catalogues in their own provinces and constantly pressed on the provincial Governments in other parts of India to have this work done at an early date. They even undertook to train candidates for the purpose. With their influence and competence they succeeded in obtaining a good response and encouragement in this direction. In 1912, for instance, Whitehead was relieved of some of his official duties by the Punjab Government with a view to allow him leisure enough for the preparation of the catalogue of coins in the Central Museum, Lahore, and was further permitted to proceed on furlough to England to see the catalogue through the press. This resulted in the publication of two valuable volumes of the catalogue of coins in the Lahore Museum in 1914 which remain the standard publications in the branches of Indian numismatics to which they relate. In the same year the catalogue of Gupta coins in the British Museum was published by one of our members, J. Allan, whereby our knowledge of these coins was materially advanced, particularly regarding the metrical character of the legends. Then the issue of the catalogue of Mughal coins in the Lucknow Museum by C. J. Brown and that of the Sultans of Delhi by Prayag Daval in the year 1920 and 1925, respectively, brought many new coins to light. Bleazby like his earlier lists of coins in the Museums at Srinagar (Kashmir) and Rangoon, undertook to prepare a catalogue of coins in the Nagpur Museum and issued it in the year 1922. A catalogue of coins of Indian States compiled by Henderson, C. J. Brown and Valentine was edited by J. Allan and issued in 1928. The catalogue of Durrani coins in the Lahore Museum by Whitehead, issued in 1933, proved the necessity and advantage of dynastic catalogues of coins in a comprehensive style. The authorities of the Prince of Wales Museum, Bombay, also followed suit and have, towards the end of the period under review, issued the Catalogue of Coins of the Gujarat Sultans compiled and edited by C. R. Singhal and G. V. Acharya, respectively. This and the catalogue of the coins and metrology of the Sultans of Delhi in the Museum of Archæology at Delhi by H. N. Wright include even the coins that are in other cabinets and as such can be termed as corpuses on the respective subjects. This welcome phase of cataloguing facilitates study to a very great extent and the students are spared the trouble of turning over the pages of various publications for a single subject. Thus almost all the important museums in India have through their various experts contributed their own quota by issuing the catalogues of their treasures for the use and reference of scholars working in different branches of Numismatics.

Memoirs.—Besides being instrumental in the production of catalogues of different Museums and collections, the Society itself has hitherto issued two occasional Memoirs, viz. 'The Coins of the Tipu Sultan' prepared by G. P. Taylor and 'A

study of Mughal Numismatics' by S. H. Hodivala. They were published in the years 1914 and 1923 respectively. These scholarly treatises gave a good deal of ready made material and a great impetus to the study of the coinage of the Sultans of Mysore and the Mughal Emperors of Delhi, respectively. A third Memoir on mint towns of the Sultans of Delhi and the Mughals, by R. B. Whitehead is under preparation. The issue of this monograph will, it is hoped, give us authoritative information about the definite location, importance and activity of mint towns under these rulers whence the tiny record of history were issued in various metals from time to time.

The Society has instituted the award of two medals every year for the promotion and encouragement of Indian Numismatics. They are (1) Nelson Wright Medal, (2) Prize Medal

of the Numismatic Society of India.

(1) H. N. Wright Medal.—At the annual meeting held at Ahmadabad in February 1917, it was announced that Mr. H. Nelson Wright, I.C.S., has presented a medal to the Society. The design for the dies of this medal is taken from a superb muhr issued by the Emperor Jahangir in the first year of his reign with the portrait of his father Akbar. Two replicas, one in bronze and the other in silver were presented by the donor himself. Thereafter the Society spends for the replicas whenever required. A bronze medal is awarded annually for the work done during the year by a member of the Society on Indian Numismatics, which is published in the Numismatic Supplement or elsewhere if such work is found to deserve the distinction. The Silver medal is kept for presentation to any specially meritorious member of the Society in recognition of exceptional services to Indian Numismatics and is very sparingly given. G. P. Taylor had the privilege of receiving the first special Silver medal in 1916. Prof. Hodivala's researches brought for him three medals, one of them being a special Silver medal awarded in the year 1926. C. J. Brown and R. B. Whitehead won two each, of which one awarded in the year 1923 to both was a Special Silver one. In the succeeding year H. N. Wright himself was the recipient of a special Silver medal. The sixth and the last during the period under review was awarded to K. P. Jayaswal. Names of other scholars whose Numismatic researches were considered worthy of the award of bronze medals are E. H. C. Walsh, H. R. Nevill, W. H. Valentine, F. D. J. Paruck, R. B. Prayag Dayal, J. Allan, S. K. Chakrabortty and C. R. Singhal, who must thus be considered amongst the foremost Numismatists of India.

No work of sufficient merit was published in the years 1918, 1927, 1929, 1930, 1932, 1933 and 1936 and hence no medal was

awarded in those years.

(2) The Prize Medal.—The Society instituted a Prize Medal in the year 1927 which is awarded to the writer of the best essay on a subject prescribed by the Society every year. No medal is, however, awarded if no essay out of those submitted

in a particular year comes up to the required standard.

The first of these Silver Medals was awarded to Pareshnath Bhattacharya in 1927. After a lapse of four years Surendra Kishore Chakrabortty got another in 1932. In the succeeding year Durga Prasad's essay merited the award of a gold Medal. In the year 1935 Capt. M. F. C. Martin was awarded another gold medal.

The Society has thus tried to encourage research in Indian

Numismatics.

Annual Meetings and Report.—The members of the Society are invited to meet once a year generally towards the end of December when the Committee of Management and office bearers for the ensuing year are elected and deliberations regarding the advancement of Numismatic knowledge are carried on. Besides reviewing the Numismatic research done during the year, members have the opportunity of discussing problems of interest and help one another in the examination and assignment of difficult or unidentified coins. Here they also have an opportunity of seeing and exhibiting unique and rare coins and listening to the illuminating Presidential addresses and papers incorporating the researches of individual scholars. All these transactions as well as other useful information including the names of the members with the subjects in which they have specialized are published in the annual proceedings, to facilitate mutual correspondence by members regarding the examination, assignment, purchase and sale of coins.

We may now turn to the researches in the different periods and branches of Indian numismatics during this period. In the beginning we may refer to the Carmichæl lectures on numismatics of Professor D. R. Bhandarkar, which throw considerable light on the origin of coins and metrology in Ancient India. The excavations at Mohenjo Daro and Harappa have brought to light several round and rectangular pieces of silver and inscribed pieces of copper conforming to a definite system of weights, which must thus be considered as the earliest attempt at currency in India. The definite beginnings of Numismatics in India, however, starts with the Karshapanas and punch-marked coins, which have happily received a great deal of attention of

late.

Punch-marked coins .- In the last century Sir A. Cunningham was the first to establish their remote antiquity and to remove the wrong notion that India borrowed the art of coinage from the Greeks after Alexander's invasion. Theobald paid a special attention to the symbols found on these coins and tried to interpret and describe them. Spooner in his description of these coins found from the vicinity of Taxila noticed for the first time the grouping arrangement of the various symbols on them, though of course his theory of their Buddhist character could not stand the test. R. D. Banerji in his learned description of these coins presented to the Asiatic Society of Bengal by the Amir of Kabul proved that the punch-marked coins were not only the earliest coins of India but were also current at the same time in Afghanistan (vide Num. Supplement No. XIII). He further noticed some new symbols and a few Brahmi and Kharoshthi letters of the Maurya and Kushan periods, V. Smith in Vol. I of the Catalogue of Coins in the Indian Museum. Calcutta, tried to assign different eras to these coins. This was followed by Walsh in 1919 who elaborately described the heards of this class of coins from Patna and Bhagalpur in the Journal of Behar and Orissa Research Society and contributed substantially to the knowledge of the different types. In recent years Jayaswal made very commendable efforts to identify some of the symbols on these coins with the Royal symbols of the rulers of the Maurya and Sunga period. Last of all mention must be made of a very systematic and thorough study of the symbols on the silver punch-marked coins with reference to various hoards found in the different provinces of India made by Durga Prasad of Benares, for which the Society has awarded him a gold medal. His further researches in this branch are also being published. The merit of his studies lies in the accurate drawings of these symbols illustrated in the numerous plates personally prepared by him. (See N.S. XLV.) He has also pointed out that some of the symbols on these coins are either identical with or bear a close resemblance to the figures and pictographs found on the Mohenjo Daro seals. whereby he has tried to establish a connecting link between the period of the issue of these coins with that of the Indus Valley Civilization.

Indo-Greek.—As in other branches, Sir A. Cunningham, James Prinsep, and J. Burgess have contributed a lot towards the study of these coins in the last century. Edward Thomas discussed the Hindu legends on them. During our own times Sir Aurel Stein noticed and described various deities on them for the first time. Our Parsi Numismatists F. J. Thanawala and F. D. J. Paruck gave some information about the Zoroastrian deity Avooshr or Avoorshr on the Indo Scythian coins. R. B. Whitehead has brought many rare verieties of the Indo-Greeks to the notice of the Numismatists. The excavations at Taxila conducted by Sir John Marshall brought to light a very large number of coins of this Indo-Greek and later rulers of North West India, including the issues of several previously unknown rulers. Two noteworthy finds of these coins at Parehwar near Amarkot and Bajapur in the N.W.F. respectively brought some new types of the coins of Philopator and Soter Megas to light. In another hoard of 970 coins a new type of Didrachmes of Menander was notable and a Hemidrachme of Zoilos with standing Herakles was quite a new variety. This necessitated the revision of our information regarding the period of this king. M. F. C. Martin's contribution to this branch of studies in this Journal incorporating the description of the coins exhibited by him at Benares in 1929 is worth studying. Students of these coins are referred to articles Nos. 82, 173, 149, 274 and 296 of the Numismatic Supplements.

Kshatrapa.—The most important contribution to this branch of numismatics is the Sarvania hoard of coins which gave several new dates to previously known Kshatrapa kings and at least one new sovereign. Rapson's successful attempt to assign an interesting copper coin to a Kshaharata prince Bhumaka who preceded Nahapana and his comparison with the bow and arrow type of Spalirises with Azes makes a definite

advance.

One hoard of 330 silver coins from Central Provinces and two hoards of about 500 coins each were recently examined by Acharya and his description bringing out some novel features

and dates appears elsewhere in this Supplement.

Kushans .- Of the Kushan coins also, though no new hoard is recorded, several new types and rarities, especially of Huvishka and Vasudeva have received due attention from scholars interested. Whitehead has noticed a new type of gold double stater of Kadphises II with Siva leaning on the bull behind him and copper of Huvishka with king seated cross-legged and wind god OADO. Tarapore has described a coin of Vasudeva with the degraded greek legend (PA) onano on left margin on the obverse. A new gold coin of Vima Kadphises with king on elephant and complete legend in Greek on the obverse and Siva and bull and Kharoshthi legend on the reverse; another of Huvishka with king on elephant and standing figure of a goddess and the third of Kanishka with the king at altar and the goddess on a lion were described by Martin. The fabric of the last two, however, as seen in the plates makes us rather apprehensive about their genuineness. A. Ghose, a keen collector of the Kushans and the Guptas has mentioned some new varieties of Huvishka and Vasudeva. On the specimen of Huvishka with half length figure of King and Sun god he has the letters Miipo. On a coin of Vasudeva he has a trident in the right hand of the king at altar. Similarly on a coin of Huvishka with Skanda and Visakha on the reverse he shows that the legend is broken in parts.

Gupta.—Coins of the Gupta sovereigns were current for a long period over the vast Gupta Empire and its borders and that account for a large number of their coins being available in the U.P. and Bengal. Nelson Wright has described a new variety of battle axe type of Samudragupta and W. E. M. Campbell has noticed a find of about 20 gold coins of Samudragupta found in village Kasarwa, Ballia district of U.P. Attempts were made by Allan and Hiranand Sastri at deciphering the legend on Asyamedha coins with the help of two varieties known so far but the last word has yet to be said from some more specimens that may be obtained in future. One of couch type, the other of Archer type with Laxmi seated on lotus and the third of copper Archer type of Chandragupta II, have been published. One peacock type with the legend Mahendrakumarah and two new varieties of lion slayer type of Kumaragupta have been brought to light by Hiranand Sastri and Pannalal. The latter scholar has also proved that the goddess seated on the lion is Parvati and not Laxmi. N. K. Bhattasali has assigned two uncertain coins in the Cabinet of Indian Museum to the ruler Samāchāra and O. C. Ganguli has shown that Vainyagupta was the name of the ruler who issued the coins under the appellation of Dvadaśaditya. R. B. Prayag Dayal has described among other coins of Kumaragupta, one thin gold token resembling the copper coin of Kumaragupta with Garuda in the upper half and the name of the king Srī Mahendrāditya in the lower half.

Tribal Coins.—A big hoard of coins of the Audumbaras one of the north-western tribes, found in the Kangra district of the Punjab, was examined and described by R. D. Banerji. The coins had legends in Kharoshthi and Brahmi script, the latter of the first century B.C. type. Banerji discovered two new names on the coins Sivadasa and Rudradasa over and above Dharaghosa which was known to Sir Cunningham.

Indo-Sasanian.—Taylor has published an exhaustive article on Successive degradations of Indo-Sasanian coins right up to the thick and dumpy pieces popularly known as Gadheya coins which were current in Gujarat and Malva for a considerable period. Whitehead has described a hoard of White Hun coins found in Kanishka's chaitya at Shahji-ki-dheri, near Peshawar and supplemented the same by describing few coins of Kidara

and Mihiragula type from his own collection.

Mediæval dynasties of Central India.—Nelson Wright has noticed eight coins of Gangayadeva found at Isurpur in Saugor District which unlike the thin and broad coins known so far were thick and only ½ inch in diameter. Burn suggested that the coins may be a posthumous issue by Gangeyadeva's son, Karaṇa, who was a great conqueror. Rapson has brought to our notice a big hoard of Bull and Horseman type coins found at Lansdowne in the Garhwal district of U.P. Except for a few coins of Sallakshanapala and Anangpāla of the Tomara dynasty the major portion of the hoard refers to Chahadadeva of Narwar. Two types of coins of this ruler are known and this find is not of the usual Narwar type which bear dates from 1233 to 1254. These coins represent Chahadadeva as an independent sovereign. The question has been further discussed with the help of contem-

porary inscriptions by R. D. Banerji when he described a big hoard of about eight hundred coins from Gwalior State. That find has the rude figure of Chauhan horseman on one side and the three lined inscription bearing the names of the ruler on the other side. Coins of Chahadadeva Asalladeva and Gopaladeva are almost equal in number while two hundred and fifty were useless being worn out. A find of 48 silver coins from Panwar in the Rawal State has been assigned by Banerji to Madanvarman of the Chandella dynasty. Though gold coins of both the larger and smaller varieties are known to exist in several Museums, silver issues of this dynasty are very rare, only one coin having been described by Sir A. Cunningham. In that find there were 8 of the larger type and 40 of the smaller variety. The legend is exactly the same as on gold ones.

Banerji corrected the assignment of the gold coins of Mehipala which were previously assigned to Mahipala of the Tomar dynasty of Delhi. The coins of this dynasty are of the Bull and Horseman type, while these gold coins which follow the arrangement of coinage of the Chedi King Gangeyadeva must be assigned to Mahipala I of the Gurjara Pratihar dynasty of Mahodaya. Similarly a find of gold coins from C.P. reported to be of Gangeyadeva were attributed by him to the Parmara

chief Udayaditya.

Coins of the Gujarat Chalukyas popularly known as Solankis were noticed for the first time by Burn, who assigned two gold coins found at Pandwaha in Jhansi District of U.P. to Siddharaja, Jayasingh of Anhilwada in Gujarat. Dikshit assigns two coins found by him at the Paharpur excavations to the early Pāla

rulers.

Assam and Arakan.—P. R. T. Gurden was the first man to work on these coins and he has described 143 coins found near Garhgaon in the Sibsagar District. These coins are assigned to Siva Singh who ruled from Saka 1636 to 1666. The name of the Queen Pramatheswari is also there and unlike other coins of the dynasty the inscription is in Persian and not in Devanagari. A. W. B. Botham who has been consistently working on native state coins has closely applied his attention to some of the tough problems of these coins and offered plausible solutions. He has described a collection of the coins of the Kachari kings unearthed in the neighbourhood of Maibong, the old Capital of Kachari kings. These coins resemble the issues of Ahom, Koch and Jaintia kings and are assigned to Narayandeva and Satrudaman. He has also proved that the Ahom coins of 1648 A.D. could not be of Pratapsingh and favours the view that they were anonymous like those of Jaintia kings, whose chronology he has revised. He is of opinion that the Jaintia coins were issued at the time of accession of each king and that each date indicated the beginning of the rule of a new king.

Banerji has described some coins with recumbent humped bull and trident and assigned them to four new kings of Arakan. The names of the kings which occur over the bull are Lalitakar,

Ramyakara, Pradyumnakar and Anta or Antakara.

Sultans of Delhi.-Coinage of the Sultans of Delhi seems to have received due attention as early as the middle of the last century. Edward Thomas had the honour of proving himself a pioneer in this branch of study. His 'Chronicles of the Pathan Sultans of Delhi' with the supplementary notices held the field for a pretty long time and is still a valuable work of reference, The catalogues of these coins in the Museums at Lahore and London by C. J. Rodgers and S. Lanepoole respectively with the fresh discoveries by other Numismatists recorded in the Proceedings and Journals of the Royal Asiatic Society of Bengal and other scientific periodicals kept the information pouring from time to time. The Indian Museum Catalogue, Vol. II, issued in 1907 was the latest work on the subject when our Society was started. From this back-ground emerged the distinguished scholars, H. N. Wright and H. R. Nevill who after founding this Society flooded the field practically every year with the fresh information and learned observations in the pages of this periodical which has been adopted as the organ of the Society ever since its inception. The location and history of the mint towns of these Sultans by the latter and a summary of all known coins of the five dynasties of these monarchs contained in a series of articles in Supplement No. XXXV by the former with his studied article entitled 'The observation on the Metrology of the early Sultans of Delhi' contributed jointly with the latter in N.S. No. XXXVIII well nigh cover the whole field. A catalogue of these coins in the Lucknow Museum issued in 1925 by R. B. Pravag Daval and various articles contributed in the pages of this periodical by other members of our Society like J. Allan, R. Burn, B. G. Bleazby, R. B. Whitehead, H. M. Whittell, etc. have also thrown a considerable amount of light on the study of these coins. No less than 35 contributions are contained in various issues of the Numismatic Supplements.

Last but not the least is the valuable publication of 'The Coinage and Metrology of the Sultans of Delhi' incorporating the rich collection of these coins in the Museum of Archæology at Delhi. It is in fact a corpus of these coins and the last word on the subject. We are glad to note that this up to date and comprehensive contribution is dedicated to our Society at the

occasion of its Silver Jubilee.

Sultans of Bengal.—Students of the coinage of Bengal also are indebted to E. Thomas for his exhaustive publications of the 'Initial Coinage of Bengal', Part I (1866) and Part II (1873). This, was followed by the Catalogue of the Indian Museum, Vol. II wherein H. N. Wright brought to light certain new types in 1907. W. H. Valentine dealt with the Coinage of Bengal

in his Catalogue of Copper Coins, Part I, published in 1914. Coins and Chronology of the early independent Sultans of Bengal published by N. K. Bhattasali in 1922 is perhaps the text book on the subject. Turning to the file of this Journal we find that H. N. Wright and R. Burn have contributed some articles on the new hoards found at different times which contained some unknown types. Similarly R. D. Banerji, published some unpublished coins and corrected the readings of some in earlier publications. H. R. Nevill brought to light some unknown types of the coins of Ghiyassuddin Bahadur and Mahmud Shah bin Ibrahim Shah. Stapleton's description of a find of 182 silver coins from Raipara of Husaini and Suri Dynasties also merits careful attention as some new coins have been noticed and add considerably to our knowledge. For a study of the coins of the Sultans of Bengal in this Journal a reference to articles Nos. 13, 25, 55, 95, 110, 157, 158, 283 and 284 is invited.

Bahmanis of Gulbarga.—Very little spade work seems to have been done in the earlier years about the coinage of the Bahmani Kings. Notes on some of these coins by H. Blochman, J. G. Delmerick, Gibbs and O'Codrington were published in the issues of the Numismatic Chronicle and the Journals of the Royal Asiatic Societies of Bengal and Bombay. Richard Burn made a few additions to Codrington's Numismatic History of the Bahmani dynasty on the strength of 869 coins found in Betul (C.P.) (vide N. S. No. VII). This was followed by Thanawala's note on some rare silver coins. C. J. Brown also noted on two later finds of these coins but no new facts could be gleaned out of them. H. M. Whittell with the evidence of a coin of Alauddin Bahman Shah dated 760, disputed the last date of his reign noted in history. This was followed by a valuable contribution of his in N.S. XXXVII (234) wherein he made an attempt to collect in one paper all available information regarding the known coins of the rulers of this dynasty. This information was supplemented by a note on a gold coin of Alauddin Humayun Shah by Ch. Muhd. Ismail and an article by M. A. Saboor. The latter has discussed at some length the historical facts gleaned from the known coins of this dynasty. Articles 49, 62, 129, 199, 231, 261, and 264 of the Supplements may be seen for details of the above material.

Adilshahis of Bijapur.—The coins of the Adilshahi Kings of Bijapur do not seem to have attracted the attention of many scholars. A glance at the Bibliography of these coins shows that there are only half a dozen articles contributed in the issues of this journal. Rev. Taylor was the first to publish some copper coins and Laris of the Kings of Bijapur (vide N.S. XV articles 90 and 91) which was supplemented by his note on three gold coins of Muhammad Adil Shah. T. Streenivas published a fourth gold coin of this king in the report of the Archæological

Department of the Nizam's State of 1921-24.

Ch. Muhammad Ismail discussed the epithet Ablābali of Ibrahim Adil Shah which is found on his copper coins in articles 231 and 254. He further gave full and correct readings of the five available gold coins of Muhammad Adil Shah. Nothing more of the coins of this dynasty has yet come to light.

Nizam Shahis of Ahmadnagar.—Practically little is known about the coins of the Nizam Shahi Kings. A solitary attempt by Framji Thanawala at describing about half a dozen copper coins of Burhan I, Murtaza I, and Burhan II of Nagar, Doulatabad and Burhanabad mints is noticed in article 48 of the supple-

ment No. VII.

Qutubshahis of Golkunda.—We have a solitary article No. 64 in our Supplement XI wherein Richard Burn published the coins of Abdullah Qutub Shah and his successor Abdul Hasan with the dates 1068 and 1095 respectively. They bear a legend that is very touching. Some more coins have since come to light but unfortunately they are not yet published.

About the coinage of the Imad Shahi Kings of Berar and the Barid Shahis of Bidar we know very little. Stray coins are

noticed here and there.

Sharqis of Jaunpur.—About the coinage of the Sharqi kings of Jaunpur earlier notices by J. G. Delmerick, J. Gibbs and Sherring can be seen in the volumes of the Numismatic Chronicle, Journal and Proceedings of the Asiatic Society of Bengal while in volumes of this Supplement we find but two articles, one by H. R. Nevill about a new copper coin of Jaunpur (Vide XXVI-158) and another from the pen of H. M. Whittell in No. XXXVI-228). The latter has discussed at length the history and chronology of these kings with special reference to original authorities and the subsequent notices and has added a catalogue of all the known coins and coin types of the four rulers (Ibrahim, Mahmud, Mahmmad and Hussain Shah) of this dynasty including those contained in the catalogue of these coins in the British, Indian and Lahore Museums.

Sultans of Gujarat.—Earlier notices and descriptions of the coins of the Sultans of Gujarat are to be found in Vol. LVIII of the Royal Asiatic Society of Bengal by E. E. Oliver and in the catalogues of these coins in the British and Indian Museums by S. Lanepoole, C. J. Rodgers and H. N. Wright. But a more concentrated and detailed study of these coins was made by that keen collector and enthusiastic student of these coins, G. P. Taylor who from Ahmedabad—the capital of these Sultans despatched the results of his researches to be published in the Journals of the Bombay Branch of the Royal Asiatic Society, (Vol. XXI) as well as in the Numismatic Supplements articles 46, 162 and 200. He was succeeded by another ardent Numismatist Hodivala, who brought a large number of unpublished coins of this dynasty to light (vide J.B.B.R.A.S., Vol. II) and discussed the types, metrology and history of these coins in details.

The mystery of the Shah-i-Hind coins was also dispelled by him (vide N.S. XL-276). A. Master, K. N. Dikshit (I.A., Vol. XLVII) and T. B. Harwood also made some contributions to the study of these coins (vide articles 107, 235, 270). An exhaustive catalogue of these coins in the Prince of Wales Museum, Bombay including all known coins in other private collections and Museums, was issued towards the end of the Jubilee year of the

Society.

Khiljis of Malwa.—A student of the coinage of Malwa must be aware of the original work done by J. G. Delmerick published in Vol. XLV of the Journal of the Royal Asiatic Society of Bengal. L. W. King improved upon this material and published the 'History and coinage of Malwa' in two parts in N.C. III and IV (4th series). In his catalogue of coins in the Indian Museum, Calcutta, Vol. II, H. N. Wright has recorded all the coins in the Cabinet of that Museum in 1907. This was supplemented by an 'Addenda', which appeared in N.S. XI-63 two years later. In the light of further coins noticed by him in certain other Museums and private collections he contributed a comprehensive list of the fresh notices in N.C. Vol. XII (5th series). C. J. Brown's note on some copper coins discussed in Balaghat, C.P. (vide N.S. XXIV—145) reveals a debased type of these coins current in Gondwana.

The latest contribution on such of the coins, that still remain unnoticed and are acquired for the cabinet of the Prince of Wales Museum from the Hamilton collection, from the pen of C. R.

Singhal is appearing elsewhere in this issue.

The Mughal Emperors.—Coins of the Mughal emperors have received the greatest attention of the Indian Numismatists. It may be that partly due to the abundance in which they are found and partly due to the easy identification they afford that comparatively more scholars are attracted towards this branch. Like other coins, those of the Mughals were also noticed in the middle of the last century and certain rich collections were already formed within the next four decades. C. J. Rodgers deserves the credit of being the first to carry systematic research on these coins. It was he who prepared a catalogue of these coins in the Central Museum, Lahore including his own collection purchased by the Punjab Government as early as 1893. This was preceded by the catalogue of these coins in the British Museum by Stanley Lanepoole by only a few months. The former was brought up to date with corrections in previous publications by R. B. Whitehead in 1914 while Addendas to the latter collection are published from time to time by J. Allan and H. Nelson Wright had already published a scholarly volume of the coins in Indian Museum, Calcutta, a couple of years prior to the formation of the Numismatic Society of India. The most comprehensive of the catalogues of these coins is that of the richest cabinet of the Lucknow Museum published by C. J. Brown in 1924. In this connection mention must be made of the scholarly and illuminating treatise, viz. 'Historical studies in Mughal Numismatics' by Hodivala issued as the second occasional memoir of the Society in 1923, which gives us all that is required for a critical student of Mughal Numismatics. Turning to the file of this journal we find that out of a total of 327 articles recorded in the 45 issues that are out hitherto no less than 145 contributions are made towards the study of Mughal coins by various scholars. G. P. Taylor whose contributions numbering 40 mostly on Mughal coins appear in almost every issue of the N.S. from its very inception to his death in 1920. His keen observation and systematic study of the coins opened a number of topics for research in Mughal Numismatics. Another lot of contributions of outstanding merit come from the pen of Hodivala who from his very first appearance in N.S. XXVII in 1924 made it felt that the knowledge of original and contemporary authorities is very essential for a thorough study of the coins. His scholarly articles based on the knowledge of these authorities with the discussion of the minute details added force and finality to the subject he dealt. His inventory of the Abulfazal's list of Akbar's mints, the discussion of the location and reading of several Mughal Mints, his study of the chronology of the Zodiac coins of Jehangir are typical examples of his scholarship. He has laid the student of Mughal Numismatics under a deep debt of obligation by correcting a number of mistakes in previous publications and affording a reliable guidance to these studies.

Richard Burn with his establishment of types of Mughal Coins and a list of mint towns, Whitehead with his revised list of the same and a notice of many new types, and Wright by his useful notes have provided valuable references for the study of Mughal coins. G. B. Bleazby, Framji Thanawala, Irvine, Vost and Brown are among those who are responsible for bringing a large number of new specimens to light and the discussions of various aspects thereof. As regards the coinage of the later Mughals a large number of mints have been brought to light by various scholars. Several of these need exclusion in view of their assignment to the local authorities by R. G. Gyani. The task of scrutinizing the local history of all such mint towns with a view to assign them to the respective local authorities is yet to be undertaken.

Indian States.—The coins of the Indian States seem to have been considered all along a tough problem and that accounts for the paucity of articles on them. Even a veteran Numismatist like Banerji used to shrug his shoulders at the sight of thick dumpy pieces of Indian States with fragmentary inscriptions in more languages than one. The early attempts of Webb and Valentine in this field as well as the Vol. IV of the coins in the Indian Museum are far from exhaustive and fall far short.

of the entire field to be covered. For preparing a Corpus of the coins of States all over India, a number of scholars ought to visit the capitals of these States for examining various coins in the state treasuries and collecting information about the respective mints from state records. Baroda appears to be the only state of which the later coins have been described at sufficient length by Taylor and Gyani. The latter has published several new types and discovered a mint at Amreli in Kathiawar. P. Thorburn has described several coins of Dholpur, Bundi, Jodhpur and Manipur from his own collection. A gold coin of Bappa Raval with the Bull, Cow and Calf described by G. H. Ojha and a Hatkeshwar Kori of Junagadh described by Taylor

are both unique and deserve special attention.

South Indian Coins. South Indian coins are equally neglected and excepting Elliot's book with four plates and a few detached articles by Raghav Aiyangar, and M. T. Desikchari there is no guidance for assigning and dating big hoards of gold coins found from Southern India. Kundangar has described few typical coins in the Kolhapur Museum and has shown two distinct types which he designates as Kolhapur and Satavahana types. Martin has assigned three coins from his collection as those of Gautamiputra Sri Satakarni Vasitthiputra Sri Pulumavi and Vasitthiputra Siva Sri Satakarni. J. H. Henderson the author of the coins of Haidar and Tipu Sultans has discussed in a learned article the origin of the Mauludi era and from Tippu's correspondence containing corresponding dates in both the eras he has substantiated his solution. Aiyangar has noticed three new finds of the Padma tankas of the Yadavas of Devagiri from Singhana II (1131s') to Sri Rama (1193s') Rajarajachola and two sets of rare coins one of which he connected with Madhavadeva (1208-39 A.D.) who was a subordinate of Kakatiya kings and whose line ruled over Addanki for over 100 years. Rev. H. Heras has made one more attempt to solve some of the South Indian Numismatic puzzles whereas he proposes to assign the so-called Gajapati Pagodas of Orissa as coins of Mallikarjuna of the Vijayanagar dynasty.

Indo European .- H. N. Wright found difficult at the time of examining a treasure trove find of 119 Native styled rupees of Shah Alam Learing the mint name Murshidabad, to definitely fix the year where the native coinage ceased and company's coinage began. He examined the various materials likely to be helpful and ultimately laid down the special features of interest disclosed from the said find. John A. Bucknill has contributed a learned article describing the coinage of the British East India Company's settlement at Penang. There was a welcome attempt at the Danish coins of Tranquebar collected

and noticed by Rev. H. Heras.

Miscellaneous coinage and literature.-A. Master who has specialized in Post Mughal coins of Ahmedabad has described

a number of specimens at great length with special reference to various mint marks and ably supplemented the same by a historical survey of that period.

The bibliography of the literature on Indian coins by C. R. Singhal and of Sasanian Numismatics by F. D. J. Paruck have

been a great help to workers in the respective fields.

Master's article on 'Arthasastra on Coins and Minting' reviewing the numismatic terms used, and describing the Organization for Coining; H. Stagg's commendable effort at supplying the history and description of His Majesty's Mint at Calcutta, and the Prize Essay on the Monetary System of India at the time of the Muhammadan Conquest by P. N. Bhattacharya, form a scholarly type of literature likely to be useful to future workers in this field.

G. V. ACHARYA. R. G. GYANI.

INTRODUCTION.

1. The chief source for the study of this period is numismatic. The silver coins, which are of a high degree of rarity, show the most profitable field for research as they are of Sasanian type and are therefore connected with a firm chronological background. On the other hand the gold and base gold coins follow the Kushan style; the type springs from the Late Kushān series the varieties of which have not yet been classified either chronologically or geographically, and which, after an existence of several centuries, merges into the series struck in Kashmir by the Karkotaka or Naga Dynasty in the seventh century A.D. This series of gold coins, in addition to showing no sharply determined commencement or end, must have been affected by the cataclysmic invasions of India by the White Huns in the fifth and sixth centuries A.D., yet it shows no marked signs of such influence. Its long life indicates that it may have been struck by several dynasties, a supposition confirmed by its findspots, as the writer possesses specimens unearthed as far to the east as Kanauj and Kosam in the U.P., and Prayag Dayal describes in J.P.A.S.B., XXX, 1934, Num. Suppl., XLV, a find of 12 from Hardoi District. For the above reasons this article ignores the gold series and draws its numismatic arguments solely from the silver coins and the few bronze coins of Sasanian type.

2. During the years 1930 and 1931 the writer had the good fortune to add to his collection four small trouvailles of silver coins of the Little Kushān dynasty, including several important and unpublished types. While on furlough in England in 1932 he was greatly encouraged in his study of these by the kindness of Mr. John Allan, Keeper of the Coins in the British Museum, who not only gave him permission to publish any coins in the cabinets under his charge, but also gave him numerous references

to publications dealing with the period.

The object of this paper is to publish these recently found coins, to show that Kidāra ruled in the fourth century A.D. and not in the fifth as previously supposed, and to endeavour to reconstruct the history of the period from the scanty historical and numismatic evidence available.

 This evidence, however, is of such a flimsy nature that few even of the main steps in the argument may be taken as finally proved, though the circumstantial evidence in their favour

affords strong grounds for presuming them correct.

Now arguments based on circumstantial evidence cannot proceed with the even forceful flow of pure logic or mathematics.

They must start with a careful sifting of a portion of the evidence from which a theory can be formed only on the broadest lines. This theory must then be tested to see if it is consonant with the remaining evidence, and, if it stands the test, it may then be slightly amplified by a detailed consideration of some other portion of the available evidence. This amplified theory must again be tested, and, if not discredited, may be amplified still further; the process continuing till all available evidence has been utilized.

The writer therefore apologises for the length of this article. Though he could have arrived at the same conclusions in fewer words he has endeavoured to test the results in the light of all

the evidence he has been able to trace.

THE CHINESE HISTORIANS.

4. The story of the dynasty can be obtained, in its broadest outlines, from the statements of the Chinese annalists. These however give practically no chronological data and are most obscure in their geographic statements owing to their lack of method in transliterating foreign place-names into Chinese.

Our chief Chinese source is the 'Wei-shu' or annals of the Wei Dynasty (386-556 A.D.) of which I have used Specht's translation. Many extracts from this and from earlier annals were included in the encyclopædia of Ma-touan-lin (13th century A.D.), parts of which have been translated by Remusat and by Julien. For the identification of the Chinese place names I

have depended altogether on Marquart.

5. The following extracts have been translated by the writer from the above-mentioned French translators, and a glossary attached giving Marquart's identifications of the Chinese placenames. It must be remembered that the Kushāns, originally a branch of the Yueh-chi confederacy, are habitually referred to by the Chinese under the name "Yueh-chi".

Extract I.—From Specht's translation of the Wei-shu.

'The Kingdom of the Ta-Yueh-chi has for its capital the town of Lou-Kien-Chi to the west of Fo-ti-cha, at a distance of 14,500 li from Tai. The Ta-Yueh-chi found themselves threatened on the north by the Jouan-Jouan, and were exposed on several occasions to their raids. They therefore migrated to the west and established themselves in the town of Po-lo, 2,100 li from Fo-ti-Cha. Their King Ki-to-lo, a brave and warlike prince, raised an army, crossed to the south of the Great Mountains, and invaded Northern India where the five Kingdoms to the north of Kantho-lo submitted to him.'

Note:—Ma-touan-lin says 'Ensuite, leur roi Ki-to-lo
......etc.'; which implies that Ki-to-lo was
their King at the time of their migration to Po-lo.

Glossary :-

Ta-Yueh-chi .. Great Kushāns. Lou-Kien-chi .. Balkh (Marquart, pp. 88, 89).

Jouan-Jouan . . A tribe in Central Asia akin to the White Huns.

Po-lo .. . Balkan. On the north of the old bed of the Oxus where it flowed into the Caspian Sea East of Krasnovodsk (Mar-

quart, p. 55).

Ki-to-lo . . . Kidāra. The true form of his name is shown by the Brāhmi script on his coins.

The Great Mountains. . The Hindu Kush.

Kan-tho-lo

Gandhāra, which corresponds to the modern Peshawar District (Marquart, p. 211).

7. The above does not afford us a clue to the dates of these happenings, and for such we must turn to Ma-touan-lin who gives us a general history of the Great Kushāns. He tells us that after they conquered Northern India under Vima Kadphises (c. 90 A.D.), the Great Kushāns became rich and powerful.

Extract II .- From Julien's translation of Ma-touan-lin.

'They remained in that condition (i.e. rich and powerful) until the time of the Second Han Dynasty (221–263 A.D.) when they found themselves threatened on the north by the Jouan-Jouan and were exposed on several occasions to their raids.'

8. The Chinese Annalists do not carry the story of the Great Kushāns beyond Kidāra's invasion of India, so we must now consider their statements regarding the Little Kushāns.

Extract III.—From Remusat's translation of Ma-touan-lin.

'The capital of the Little Yueh-chi is the town of Fou-leou-cha. Their king was a son of Ki-to-lo; he was placed in charge of this town by his father when this prince was forced, by the attacks of the Jouan-Jouan, to march Westwards.

Glossary:—Little Yueh-chi Little Kushāns.
Fou-leou-cha . . Peshawar (Marquart, p. 211).

Extract IV.—From Specht's translation of the Wei-shu.

'Kidāra, having been pursued by the Hiung-nu, and having retired to the West, ordered his son to establish himself in this town of Fou-leon-cha. These people are consequently called Little Yueh-chi.'

Note:—Specht notices that the Wei-shu refers here to the Hiung-nu while T'ong Tien and Ma-touan-lin both say Jouan-Jouan.

9. The Chinese give no further historical details about the Little Kushāns, but, in describing their country, state that merchants from it introduced great improvements in glass-making into China in the time of the Second Wei Dynasty, during the reign of Tai-von (398–409 A.D.). This suggests that the establishment of the Little Kushān Dynasty in Gandhāra should be dated prior to 409 A.D.

10. We have now got a sketch of the history of the Little

Kushān Dynasty in its broadest outlines.

At some period between 221 A.D. and 409 A.D. a branch of the Great Kushāns was driven from Bactria by the Jouan-Jouan and dispersed in two directions:—

> (a) Westwards, along the northern borders of the Sasanian Empire towards the Caspian,

and (b) Southwards, across the Hindu Kush into Northern India.

This southern branch was led by Kidāra and occupied Gandhāra. At a later period Kidāra again felt pressure from some Central Asian tribe, about the name of which the Chinese felt some uncertainty, and, leaving his son in Peshawar, moved westwards to resist them.

As it is highly improbable that the Kushāns, who were not strong enough at the time to hold Bactria, could have kept up intimate contact between their branches in India and on the Caspian, I assume that Kidāra's dominions stretched westwards from Gandhāra along the basin of the Kabul River and so he transferred his army from Peshawar to Kabul in order to prevent his foes from crossing the Hindu Kush from Balkh (see para. 38 below). He therefore left his son in Peshawar, as ruler of his eastern provinces.

The Chinese do not tell us the history of the later Little

Kushān Kings in Peshawar.

THE KUSHANO-SASANIAN RULERS IN BACTRIA.

11. The above wide chronological limits for the date of the dispersal of the Kushāns from Bactria can be narrowed considerably by a study of the Kushano-Sasanian coin series. Professor Herzfeld has divided these into two groups :-

(a) Those struck by Princes of the Sasanian Royal Family as Viceroys in Balkh and Merv. These bear the title 'King of Kings of the Kushāns'.

(b) A later series struck by provincial governors, bearing

the title 'King of the Kushans'.

The Kushāns cannot have been driven from Bactria by the Jouan-Jouan till the end of this later series, and Sasanian rule in Bactria can scarcely have survived the upheavals accompanying this dispersal.

Further, the known history of the Sasanian Empire must

refer in some way to these disturbances.

12. Herzfeld has shown that the first series continued from about 230 A.D. to 284 A.D., when, on the Sasanian conquest of Sakastān, the heir-apparent was transferred as Viceroy to that province, and that the second series commenced at that date and continued to some point in the reign of Shapur II (309–379 A.D.).

Ammianus Marcellinus tells us that Shapur II was engaged in wars on his eastern borders from about 350-358 a.d., the Kushāns being named among his opponents (see para. 20 below) and Herzfeld has suggested ('Kushano-Sasanian coins, p. 36) that this series of coins may have continued up to the end of

these wars.

I therefore assume, as a working hypothesis to be tested by the evidence of the Little Kushān coin series, that the Eastern wars of Shapur II which ended in 358 A.D. were directly caused by the dispersal of the Kushāns from Bactria and that this date occurred during the reign of Kidāra.

PRELIMINARY CONSIDERATION OF LITTLE KUSHAN COINS.

- 13. I have already explained (para. 1 above) that the silver and bronze coins of the Little Kushāns show the most profitable field for research. General Cunningham published some of these in Num. Chron., 1893, accompanied by a plate (No. VI) on which Nos. 1, 2, 5, 6 and 7 are silver coins and Nos. 8 and 9 are copper or bronze. Another silver coin was published by Mr. Vincent Smith but was allocated incorrectly to the main Sasanian series (Indian Museum Catalogue, Vol. I, 1906, Plate XXIV, No. 8). The plates accompanying this article show the above coin types and all other varieties known to the writer, with the exception of some of the copper coins of Tarika which are too poorly preserved for reproduction.
 - 14. The objects of this preliminary study are as follows :-
 - (a) To pick out those coins which must belong to the main dynasty and not to provincial governors.

(b) To determine the order of succession of the rulers of the main dynasty on stylistic grounds,

and (c) To test whether the coins support the assumption made in para. 12 that the dynasty flourished in the latter half of the fourth century A.D.

15. Of the silver coins five types are closely inter-linked:—

Kidāra type I Pl. I, Nos. 1, 2. Kidāra type II ... Pl. I, Nos. 4, 5.

Piro type I .. Pl. I, Nos. 15, 16, 18 ... and Pl. II, Nos. 19-21.

Piro type II .. Pl. II, Nos. 22 and 23, and Varahrān Pl. II, Nos. 26, 29 and Pl. III, Nos. 30-36.

The arrangement of these coins presents little difficulty. All are found in North-Western India, all are of the same dynasty, and we know from the Chinese annalists the Kidāra was the first of his dynasty to rule in India.

The two types with full-faced bust, Kidāra type II and Piro type I are closely connected with one another. A detailed stylistic comparison of all the types is given in Appendix II to this paper, but at this stage it is only necessary to refer to the following salient points which are common to these two types :-

(a) Full-faced bust.

(b) Obverse legend in Brahmi script. (c) Shoulders draped with palmettes,

and (d) Fire-altar on reverse has bust of Hormizd appearing in the flames.

Among the coins at present known, Piro type I shows closer kinship with Kidāra type II than is shown by any other coin. We may therefore assume that Kidara and Piro were next to one another in dynastic succession and that type I of Kidāra preceded type II. This point is amplified in para. 27 below.

It appears in consequence that Piro was the son to whom

Kidāra committed the charge of Peshawar.

15. Next, comparing the two types of Piro's coins, we see they have the following points in common :-

(a) A crown of two rams horns surmounted by a fluted globe with flanking fillets.

(b) Beard passed through a ring.

(c) Shoulders draped with palmettes.

The coins of Varahrān are very similar to Piro type II. Though the crown is different it is again surmounted by a fluted globe with flanking fillets. The beard is again passed through a ring and the shoulders of both are draped with palmettes.

These considerations make it a reasonable assumption that

Varaharan succeeded Piro in Peshawar.

16. The remaining coins illustrated in plates IV and V do not appear to have been struck by the main dynasty, but by provincial satraps or governors owing allegiance either to the Little Kushans or to the Sasanians. This point will be discussed

more fully in paragraphs 25 to 28.

17. It will be seen that the first type of Kidara shows the King's face to the right in accordance with the usual Sasanian practice. His second type, however, as does the first type of Piro, shows a full-face portrait; while the second type of Piro and the coins of Varaharan show a reversion to the previous class as their portraits face to the right.

These variations have a deep historical significance as they indicate the fluctuating political relationships between the Little Kushāns and the Sasanian Empire. Professor Herzfeld has shown on pages 3-5 of his memoir on Kushāno-Sasanian coins

that :-

'The direction to the left was the Arsacid one and all the feudal princes who had the royal right of coining and whose lands formed an integral part of that curiously diffuse empire, had to adopt the Arsacid style. The opposite direction of the head proves a greater degree of independence, and hence is adopted by the Sasanids immediately after they had thrown off the Arsacidan yoke.'

Herzfeld also drew attention to the fact that rebels against the Arsacid rule, up to and including Ardeshir I during his actual rebellion against Artabnus V, struck coins bearing a Further, he showed that the same custom, facing portrait. mutatis mutandis, was followed in Sasanian times; the suzerain dynasty striking coins with their heads to the right, feudatory princes following their example, while rebels and independent princes struck coins with portraits either full-face or to the left.

Applying this rule to the coins under discussion, it will be seen that Kidara was at first feudatory to the Sasanian empire, that he later became independent and that, during the reign of Piro, the Sasanians reasserted their claim to suzerainty, as this king, and his successor Varaharan both struck coins with their portraits to the right in acknowledgment of this claim. change in legend from Brahmi to Pehlevi which occurs at the same time as this change in direction on Piro's coins confirms that Sasanian influence was strong in Gandhara at this period.

18. The fact that the reigns of Kidāra and his successors Piro and Varahran should be referred to the latter half of the fourth century A.D. is clearly demonstrated by the following

points :-

(a) Type I of Kidara is directly copied from coins of the middle period of Shapur II. It is slightly exceptional in the great breadth of the crenellations on the crown; in this respect the nearest analogy is to the copper coin with Greek-Kushān legend 'ροβορο'. (Cunningham N. C., 1893, plate IV, 9) which Herzfeld (1.c. p. 37) refers to Balkh during the first period of his reign. (See also para. 21.)

(b) The satrapal coin, Pl. V, No. 54, is closely connected with the same copper coin of Shapur II, by the arch of pearls which surmounts the central crenella-

tion of each crown.

(c) The satrapal, coin, Pl. V, No. 56, bears a crown modelled on that of Ardeshir II (379–383 A.D.).

- (d) The satrapal coins, Pl. V, Nos. 55 and 67–71, bear crowns modelled on that of Shapur III (383– 388 a.d.).
- (e) Find No. V, described in Appendix III to this paper, contained two coins Varahrān IV (388-399 A.D.).

(f) Find No. VI contained coins both of Shapur III and Varahrān IV.

(g) The reverses of Kidāra type II and of Piro type I show supporters facing the altar with swords at the 'carry', and, in addition, a bust of Hormizd in the flames on the altar. These coins can only be referred to the fourth century A.D. as these points occur in the main Sasanian series only on coins of Shapur II to Varahrān IV.

(h) No coins of Yezdegerd I (399-420 A.D.) appear to have been found in conjunction with coins of this

dynasty.

19. From the testimony of the Chinese historians and of the coins it would appear that Kidāra flourished about the middle of the fourth century A.D., and, in addition, the coins show us that he was at one time tributary to Shapur II but later became independent. It appears that some echoes of these events are preserved by contemporary historians and by an inscription recently discovered by Professor Herzfeld at Persepolis.

STATEMENTS BY CONTEMPORARY HISTORIANS.

20. Ammianus Marcellinus, an officer in the Roman Army who fought against Shapur II in Mesopotamia, tells us that from 350 to 385 A.D. this monarch was occupied in war against tribes on his eastern frontier and that his most important opponents were the Chionitæ and Euseni. The latter name has long been recognized as a textual corruption for Cuseni or Kushāns. In 358 A.D. Shapur made peace with these tribes

and picked a quarrel with Rome. In 359 A.D. he invaded Mesopotamia and besieged the Roman fortress of Amida, the modern Diarbekr, where he was assisted by contingents of his former foes. The text of this passage (Ammian 19; 2, 3) is, unfortunately, very corrupt, but for the reading which restores the Cuseni or Kushans as one of the contingents before the walls of Amida cf. Marquart's 'Erānšahr', p. 36, Note 5.

21. Professor Herzfeld (l.c., page 36) has found an inscription at Persepolis dated in the year 47 of Shapur II, corresponding to 356 A.D. This was written by Slok, High Judge of Kabul who prayed that Shapur would return to Kabul in safety. This, taken in conjunction with Ammian's statement that Shapur II spent the winter of 356-57 A.D. in the furthermost limits of his Kingdom, on the borders of the Chionitæ and the Euseni shows that Kabul was Shapur's base for the campaign of 356 A.D., and was near these tribes.

Now Kabul is an excellent base for operations against Gandhāra but is not nearly as suitable as Herat for operations north of the Hindu Kush. The operations of 356 A.D. were probably chiefly directed against Gandhāra, which indicates that

Kidāra had already occupied that area.

Sir John Marshall has found several of the Mery coins of Shapur II mentioned in para. 18(a) above in excavations at Taxila (see ASI-AR, 1914-15, Nos. 48 and 49 and ASI-AR, 1915-16, Nos. 51 and 52). These may have been brought down to India during the Little Kushan invasion. They were the coins current in Bactria immediately preceding the date I

assume for Kidāra's occupation of Gandhara.

 Professor Herzfeld (l.c., page 50) attributes certain coins to the Chionites. These coins, one of which Cunningham illustrated (Num. Chron., 1894, Pl. VII, 1) bear a bust to the right, wearing the headdress of Shapur II, and, as they are very similar to the Merv coins of Varahran V, they were probably struck there. 1 As the direction of the bust shows that the Chionites were tributary to the Sasanians Professor Herzfeld has attributed these coins to the period immediately following the peace of 358 A.D. For identical reasons I would assign the first type of Kidāra's coins, which are of Gandhāra provenance, to the same period. As a natural corollary it follows that the Euseni or Cuseni of Ammian were the branch of the Great Kushāns led by Kidāra, whose invasion of Gandhāra must have taken place before 356 A.D. I am of opinion that this invasion

¹ If the Chionites were in occupation of Merv at a period when the Jouan-Jouan had just occupied Bactria, it is probable that both names are identical. Herzfeld (l.c., p. 19) read the tribal name on the Chionite coin as 'OIONO'—Avestan 'hyaona', Parisk 'Xiyonan', Latin 'Chionite'. The Chinese 'Jouan' is very similar, and perhaps identical with these other forms.

and the contemporary move of another portion of the tribe from Balkh to the Caspian were the immediate cause of the Eastern wars of Shapur II, and I would therefore date Kidāra's invasion of India at circa 348-50 A.D., and his subjugation by

Shapur II in 358 A.D.

23. The Armenian historian Faustos of Byzantium refers on two occasions (Book V, Chaps. 7 and 37) to warfare between the Kushāns and Sasanians in 367/8 A.D. From these it would appear that the Kushāns were the aggressors and inflicted two crushing defeats on the Sasanians, annihilating one of their armies and, on another occasion, forcing Shapur II to fly for his life from the field of battle.

As we know from the coins that Kidāra, after a period of allegiance to Shapur II, later became independent, I would suggest that the events referred to by Faustos were the immediate result of Kidāra's declaration of independence which I would consequently date in 367/8 A.D. Cunningham read the reverse legend of type II of Kidāra's coins as a date, either 239 or 339, and referred these dates to the era of Kanishka. If the former reading is correct, and if Sten Konow is correct in dating Kanishka's Accession in 128/9 A.D., then 239 plus 128/9 equals 367/8, the exact date of the war Faustos tells us about. I do not, however, stress this coincidence as both the reading of the

coin and the date of Kanishka are controversial points.

24. From the above it would appear that the branch of the Great Kushān race which had remained in Bactria and which had come under Sasanian domination about 230 A.D. was threatened during the third century A.D. by the Jouan-Jouan, a Central Asian tribe which was massing on their northern borders. This pressure gradually increased, and towards 350 A.D. forced the Kushāns out of Bactria. A portion of the tribe migrated westwards towards the Caspian and a second portion, under their King Kidāra, invaded India and settled in Gandhāra. These movements caused a general unrest among all the tribes on the North-Eastern border of the Sasanian empire, which Shapur II was forced to quell by series of punitive expeditions between 350 and 358 A.D.

During these years he conquered the Little Kushāns and Chionitæ as well as the Albani, Vertæ and Segestani. In 358 A.D. Shapur II made peace with these tribes, whose leaders acknowledged fealty to him and assisted him on his invasion of Mesopotamia in 359 A.D. Coins have been found, struck during the years immediately following, on which, by the direction of portraiture, the Chionites and the Kushān Ruler, Kidāra show their status as feudatories to the Sasanians. Kidāra, however, appears to have rebelled at an early opportunity and to have asserted his claim to independence by a successful campaign against Shapur II in 367/8 A.D. On attaining independence he struck coins bearing a full-face portrait.

THE SATRAPAL COINS.

Before attempting to discuss the extremely meagre data available for reconstructing the later history of the main Little Kushān dynasty it will be advisable to consider a series of coins which appear to have been struck by provincial governors or satraps.

These coins are mostly of silver but a few, which appear to have been found only in Bannu District, are of copper. The copper coins alone bear the title of Satrap and all legible specimens

are of one ruler, Tarika.

A number of silver coins are illustrated on plates IV and V. These have the same flat fabric as the coins of Kidāra, Piro and Varahrān and some have been found on several occasions in conjunction with them. Stylistically they are obviously of the same period but their points of dissimilarity are so many that they appear to have been struck by provincial governors in different areas and not by Kings of the main dynasty.

26. These satrapal coins are readily divisible into two classes according to the direction in which the portraits face and some can be given an approximate date when they copy the

head-dress of the ruling Sasanian emperor.

Coins numbered from 43 to 55 in the catalogue (Appendix I) form the first class as all show a full-faced portrait. They are akin to the full-face type of Tarika in many respects, notably in the fact that their busts are not draped with palmettes. As Tarika definitely calls himself a Satrap it is probable that these

others held similar rank.

Reference is invited to the second table in Appendix II which shows in tabular form the major stylistic differences in the coins under discussion. Attention is drawn to the very gradual sequence of changes by which the type Varahran is evolved from type I of Kidara, through the latter's second type and through both types of Piro. The salient point in the comparison of these five types is that coins of Kidara type II and of Piro type I show identical treatment in respect of ten of the eleven stylistic points which are compared in the table, Piro

having a beard while Kidara has none.

Now, turning to the satrapal coins which show a full-faced portrait, it will be noted that the many variations from the style of the main dynasty preclude the possibility of including one or more of these rulers in the main line of succession without serious disturbance to the sequence of changes which we have just traced. At the same time it must be remembered that these rulers all show a full-faced portrait and all must therefore belong to the period when the main dynasty was independent. Consequently if any one of these rulers were to belong to the main dynasty he could only be inserted as the successor of Kidara and the predecessor to Piro. The fact that Kidāra type II and Piro type I are so nearly identical in style precludes the possibility of inserting any ruler at this point, and confirms the theory that the coins under discussion were struck by provincial governors.

It should be noted that coin No. 55 of this group bears a headdress modelled on that of Shapur III and must consequently date from the period of his reign (383–388 A.D.). The series may, in consequence, be dated as between the rough limits of 368 and 385 A.D.

28. The second class of silver satrapal coins consists of numbers 56 and 67–71 in the catalogue. These appear to be a continuation of the first class with the notable difference that the portraits now follow the normal Sasanian type in facing to the right. They were struck by governors owing allegiance to the Sasanian monarch either directly or indirectly through Piro or Varahran during their period of subservience to the Sasanian power.

It is noteworthy that the head-dresses of all are copied from those of Sasanian rulers, a point which suggests that they were direct feudatories of these kings and ruled over districts conquered by the Sasanians from the Little Kushāns.

The period of Sasanian expansion must have commenced during the reign of Ardeshir II (379–383 A.D.) and have continued during that of Shapur III (383–388 A.D.) as coin No. 56 bears the head-dress of Ardeshir II and the remainder bear that of Shapur III.

29. Professor Wilson states that Shapur III was entitled 'The Warlike' and conjectures (Ariana Antiqua, p. 387) that:—

'As he preserved the peace with Rome, he must have indulged his martial propensities at the expense of his neighbours in the East. It is not improbable that he effected some conquests in that direction.'

Wilson also stated that coins of Shapur III were found in the relic chamber of the Great Tope at Hidda in considerable proportion (Ar. Ant., pp. 43 and 387); a remarkable fact when we remember that We do not find the coins of the second Sapor in Afghanistan in any numbers, though there are a few' (Ar. Ant., p. 386).

Even further to the East the writer has seen two small finds, evidence of renewed Sasanian influence at this period. The first from Hashtnagar in Peshawar District contained two coins of Shapur III and four of Varahrān IV: the second of unknown provenance but seen in Rawalpindi City, contained one coin of Ardeshir II, four of Shapur III and two of Varahrān IV. The dealer owning this second lot was not in the habit of importing coins from Afghanistan.

Again, coins of Shapur III and Varahrān IV appear in conjunction with those of the Little Kushāns in the 5th and 6th finds described in Appendix II to this paper. During six years of coin-collecting on the N.W. Frontier the writer has seen only a few other isolated specimens of Sasanian coins of earlier date than Firoz.

Wilson also comments (Ar. Ant., pp. 383-387) on the searcity in Afghanistan of all Sasanian coins prior to Shapur III.

30. The above indications of Sasanian expansion towards India during the reign of Shapur III, combined with the fact that no coins of Yezdegerd I (399-420 A.D.) or his successors have been found in conjunction with those of the Little Kushans, indicate that Shapur III was the monarch who forced Piro to

acknowledge fealty to the Sasanians.

We have no direct evidence to show us the date on which Kidāra left Gandhāra in the charge of his son Piro, or when the latter was subdued by Shapur III. The only indication that we have is that coins of Kidara type II appear commoner than those of Piro type I and may have been struck over a longer period. This suggests that Piro's accession may have occurred between 375 and 380 A.D. and no closer approximation can be offered.

THE EARLY WHITE HUNS.

31. I have already suggested, in paras. 18 and 30, that the Little Kushān dynasty was extinguished in Gandhāra about 400 A.D. It also appears that Sasanian influence in this area waned at the same period: for, though satrapal coins have been found bearing the head-dresses of Ardeshir II and Shapur III none show those of Varahran IV and his successors. Further, the latest Sasanian coins of this period which are found on the Indian frontier were struck by Varahran IV (388-399 A.D.).

The natural way to explain these facts is to assume that some other power had overrun Gandhara by about this date. The wars of Chandragupta II against the Sakas appear to have been directed against the Western Satraps and not against the Sakas of the Punjab. (Vide Altekar 'A New Gupta King', J.B.O.R.S., 1928, Vol. XIV, pp. 223-254.) So we must turn our attention to Central Asia, bearing in mind that the Chinese historians attribute Kidāra's abdication from Gandhāra to the fact that his western provinces were attacked by a Central Asian tribe which conflicting sources name Huang-Nu and Jouan-Jouan.

There is little doubt that the Central Asian invaders in question were the White Huns, or Ephthalites, who established large empires in North India, Afghanistan and Turkestan during

the fifth and sixth centuries A.D.

The Chinese tell us that the original name of this people was Hoa, and that they were at first a sub-division of the Jouan-

Jouan but later became independent.

The most important branch of the White Huns as far as India is concerned appears to have been the Zabuli tribe which

gave its name to the province of Zabulistan to the South of Kabul. The tribal name appears on the coins in the Greek Kushan script as 'Zoboa' and in Brahmi as 'Jabula'. 'Jauvla' and 'Jabuvlah' and, in the Kyura inscription of Toramana as 'Jauvla'; and a study of the earlier Zabuli coins (vid para, 37 below) appears to show that they were established on the Indian borderland towards the close of the fourth century

Among the most important finds of early White Hun coins is the deposit discovered by Masson in the Great Tope at

Hidda near Jelalabad in the Kabul Valley.

This hoard has never been analysed with accuracy and has unfortunately been dispersed, but it appears from the description given in Ariana Antiqua, pages 396-399, that, though it included several coins dating from the latter half of the fifth century. the great majority, at any rate of the Sasanian issues, were struck in the closing decades of the fourth century. This is a strong indication that many of the White Hun coins in this deposit should be referred to the same period.

Most of the White Hun coins found in this Tope are of the thin broad class with strongly repousse heads. The greater proportion of these have legends in the Greek-Kushan script, some having, either alone or in addition to a Greek legend,

occasional Brahmi characters in the field.

Dr. Heinrich Junker has read some of these Greek-Kushān legends and finds that the coins are Zabuli issues of Balkh mintage.

34. As these Balkh coins bear legends solely in the Greek-Kushān script it follows that those bearing isolated Brahmi characters must have been struck south of the Hindu Kush.

This supposition is supported by the discovery of Mr. Hargreaves, in archæological excavation at Peshawar, of a hoard of very similar coins bearing Brahmi isolated characters. This hoard has been described by Mr. Whitehead in J.P.A.S.B., Num. Suppl., XXI, pp. 481-483, and the writer has obtained duplicates of these in Peshawar District.

35. That the White Huns had raided as far as Peshawar prior to 400 A.D. is suggested by a legend recorded by Fa-Hsien that an Ephthalite king had 'formerly endeavoured' to remove Buddha's begging bowl from Peshawar, but had been foiled by a miraculous exhibition of passive resistance on the part of the

relic.

The Chinese pilgrim Fa-Hsien described his visit to Gandhāra in the first decade of the 5th century A.D. and the legend is given in full on page 14 of Giles' translation.

36. The early Zabuli coins of the classes referred to in paras. 33 and 34 have, in almost all cases, their reverses totally

obliterated by the deeply repoussé obverse head.

On only a few coins are the details of the reverse at all

clear, and a large percentage of these (e.g. Whitehead, Num. Suppl., XXI, No. 18) show a bust of Hormizd appearing in the flames surmounting the first-altar, which is a fourth century characteristic as shown in para. 18 above.

Another Zabuli coin (Cunn. 1.c. VII, 2) which from its similarity to the Merv coins of Varahrān V appears to be of Mery mintage, was undoubtedly struck during the fourth century

as it is copied from the coins of Varahran IV.

The evidence discussed in the preceding paragraphs indicates that prior to the close of the fourth century the White Huns had struck coins in Merv, Balkh and south of the Hindu Kush and had even penetrated as far as Peshawar, though this appears to have been little more than a raid. It is therefore reasonable to assume that it was the gradual advance of this people that threatened the Western dominions of Kidara and forced him to leave Gandhara to his son Piro, and that the same invaders succeeded, about the beginning of the fifth century, in ousting the Little Kushans from Peshawar District and putting an end to Sasanian domination in that area.

CONCLUSION.

38. We are now in a position to continue the summary of the history of the Little Kushans from the point at which we

left them in para. 24.

It appears that Kidara, after throwing off the Sasanian yoke in 368/8 A.D., established a large empire. The Chinese annalists says that five districts to the North of Gandhara submitted to him and the coins of Tarika show that his Indian

dominions stretched South as far as Bannu,

At the same time, the statement of the Chinese that he established his son as King in Gandhara and moved to the West when pressed by some Central Asian tribe (which I have shown to be the White Huns) can only be explained by the assumption that he ruled over a considerable area to the West of Gandhāra. If this western extension of his kingdom included Kabul it is only natural that he should transfer his capital there to resist invaders from Balkh, leaving a Viceroy at Peshawar to govern his Indian dominions. One should remember that Gandhara cannot be threatened seriously by Central Asian invaders except from the West.

We know from the Chinese that Kidara set up his son in Gandhara and the coins (see paras. 15 and 27) show that this son was Piro. The date of this abdication (see para. 30) cannot

be fixed but it was probably between 375 and 380 A.D.

39. We have no record of the wars between Kidara and the White Huns beyond the fact that the latter were ultimately successful. While the Kushans were engaged in these wars the Sasanians seem to have taken the opportunity of extending their Eastern dominions. Ardeshir II reconquered at least one district over which he set a satrap (coin No. 56), and Shapur III, in addition to annexing several other districts (coins 67–71) forced Piro to acknowledge his suzerainty in Gandhāra. Varahrān, who succeeded to Piro, was also a vassal of the Sasanians.

The triumph of the Sasanians, was, however, shortlived, for their recently conquered provinces in Kabul and Gandhāra were overrun by the White Huns, apparently about 400 A.D. Sasanian influence disappears from Gandhāra about this date and it appears that the Little Kushāns retreated into the mountains around the Upper Indus Valley and Kashmir. It is not, however, proposed to trace the history of the Little Kushāns beyond this point.

40. It is realized that the above reconstruction is based on the most flimsy evidence. It is not a structure built around a firm framework of concrete fact, but a fabric woven from many

threads, any one of which, alone, may be easily snapped.

At the same time it is a theory which appears to fit in with every known fact. It is consonant with the recorded statements of Ammian, Faustos and the Chinese historians. It explains the cause of the Eastern wars of Shapur II, the inscription of Slök, High Judge of Kabul, and the soubriquet 'The Warlike' earned by Shapur III, and, in addition, all known coins, all recorded findspots and all variations in script and portraiture are woven into the fabric.

41. I wish to record my grateful acknowledgment of the help given me by Mr. J. Allan of the British Museum, who guided my readings, permitted me to study his cabinets, and prepared the casts and photos for the accompanying plates; by Mr. R. B. Whitehead who permitted me to read his manuscript chapter on the White Huns, which will shortly appear in Volume II of the Cambridge History of India; and by Mr. Dikshit and the staff of the Indian Museum, Calcutta, who deciphered the legends of the coins illustrated on the accompanying plates.

APPENDIX I.

CATALOGUE OF COINS.

Part I. Main Dynasty.

KIDĀRA.

Type I. A Drachm.

Obv.:—Bust of king to right, diademed, ends of diadem floating upwards behind head; wearing mural crown with three crenellated turrets, as shown on coins of Shapur II; crown adorned with floating fillets and central crenellation surmounted by crescent and fluted globe; bushy hair, no beard; wears ear-ring, necklace; bust ends in four lobes; grenetis. Brahmi legend (commencing 2 o'clock):—

'Kidāra Kushāna Shā.'

Rev.:—Fire-altar with triple base and capital, fillet adorning shaft; surmounted by flames in which bust of Hormizd appears to right; on either side attendant, facing altar, holds sword at the carry; grenetis.

(Plate 1) Wt. 55-7 grs. R In exergue Br.: Author, Hoard IV.
 Sha '.

2. (Plate 1) Wt. 51-5 grs. do. . Author, Hoard III. do. . Electro-type in British Museum.

Type II. & Drachm.

Obv.:—Bust of king facing, diademed, ends of diadem floating upwards from shoulders; wearing crown with three foliate ornaments, the centre one having five plumes and the flankers three each; crown adorned with floating fillets and fluted globe; bushy hair on either side of neck, no beard; wears ear-ring and necklace; shoulders draped with palmettes; grenetis.

Brahmi legend (commencing 10 o'clock).

'Kidāra Kushāna Shā.'

Rev. :- As on Type I.

4. (Plate 1) Wt. 48-9 grs. R In exergue unread Brahmi legend which may

be a date.
Do.
G. Wt. 53-0 grs.

be a date.
Do.
do.

Author, Hoard III.
British Museum exCunningham collection 1894 published
in Num. Chron.
1893 Plate XV. 1.

7. Wt. 56·0 grs. Do. . . Do. do. Plate XV 2.

S. Do. .. Do. Ex Cunningham collection 1894 unpublished.

9. Do. . Excavated at Taxila vide A.S.R. 1915-16,

10-14. Do: Excavated at Jaimalgarhi vide A.S.R. (Frontier Circle) 1920-21, Appendix V items 140, 263 and 264.

PIRO.

Type I. A Drachm.

Obv.:—Bust of King, facing, diademed, ends of diadem floating upwards from shoulders; wearing crown with two ram's horns curving outwards and central foliate ornament of five plumes; crown adorned with floating fillets and fluted globe; bushy hair on either side of neck, small moustache, beard with end passed through ring; wears ear-ring and necklace; shoulders draped with palmettes; grenetis.

Brahmi legend : feft, 'shā '. right, 'Pirosa '.

- Rev.:—Fire-altar with triple base and capital, fillet adorning shaft; surmounted by flames in which bust of Hormizd appears to right; on either side attendant, with plumed head-dress, faces altar with sword at the carry; grenetis.
- (Plate 1) R In exergue Brahmi 'na '.. Author, Hoard VI. To right, Brahmi 'Piladha '.
- (Plate 1) R In exergue, Brahmi, 'na' Author, Hoard V.
 Broken, ½ coin. Do. . . Author, Hoard IV.

Type I (a).

Obv.:—As type I but Brahmi legend varied: right 'shāhi 'left 'Piro'.

Rev. :- As type I.

- (Plate 1) R In exergue, Brahmi 'na ' Author, Hoard VI. To right, Brahmi 'Piladha '.
- 19. (Plate 2) Do. . . Author, Hoard VI.
- 20. (Plate 2)
 R In exergue, Brahmi, 'na' Author, Hoard V.
 To right, indistinct Brahmi
 characters commencing with
 'ba'.
- 21. (Plate 2) Do. .. Author, Hoard V.

Type II. A Drachm.

Obv.:—Bust of King to right, diademed, ends of diadem floating upwards behind head; wearing crown with two ram's horns curving to back and front and central foliate ornament of three plumes; crown adorned with floating fillets and fluted globe; bushy hair behind neck, small moustache, beard with end passed through ring; wears ear-ring and necklace; shoulders draped with palmettes; grenetis.

Before face :- Brahmi ' Pi '.

Pehlevi legend (commencing 4 o'clock) :-

Rev.:—Fire-altar with triple base and capital, fillet on shaft, surmounted by flames; on either side attendant, with close-fitting broad-brimmed head-dress facing altar with sword at the carry; grenetis.

22. (Plate 2) R. In exergue, Brahmi 'na' . . Author, Hoard V.
23. (Plate 2) Do. . . Author, Hoard VI.
24, 25. Do. . . British Museum, ex
Major Hay, 1860.

VARAHRAN.

Type I. A. Drachm.

Obv.:—Bust of King to right, diademed, ends of diadem floating upwards behind head; wearing crown with foliate ornaments, showing three, five and three plumes respectively; crown adorned with floating fillets and fluted globe; bushy hair behind neck, small moustache, beard with end passed through ring; wears ear-ring and necklace; shoulders draped with palmettes; grenetis.

Pehlevi legend (commencing 4 o'clock):— 'Lur Varahran'.

Rev.:—Fire-altar with triple base and capital, fillet on shaft; surmounted by flames; on either side, attendant, wearing close-fitting, broad brimmed head-dress, facing altar with sword at the carry; grenetis.

26. 27.	(Plate 2)	Author, Hoard V. Indian Museum, Calcutta, Plate XXIV 8. Repub- lished Paruck XIII
28.		296. British Museum, ex Deane, 1919.

Type I (a). As on Type I but legend 'Varahran or 'Varahran apzun'

Obv. :- To right, Brahmi ' Pi '. 29. (Plate 2)

R In exergue, Brahmi 'Na'. R In exergue, Brahm Author, Hoard VI. Author, Hoard V. Brahmi 30. (Plate 3)

· Nadaya '. Author, Hoard V. 31, 32. (Plate 3). R In exergue, Brahmi 'Nadaka'.

Author, Hoard VI. Brahmi In exergue, 33-36. (Plate Nada'.

Similar to 29-36 37, 38.

British Museum, ex Grant, 1923. British Museum ex

Similar to 29-36 39-41. Do. 42.

Hay, 1860. Museum British (India Office Collection).

Part II Provincial Rulers.

VARO SHAHL.

Type I. R Drachm.

Obv. :- Bust of ruler, facing, diademed, ends of diadem floating upwards from shoulders; wearing crown with three foliate ornaments, the centre one having three plumes, the flanker two each; between these ornaments, crescents, crown adorned with floating fillets and smooth globe; bushy hair on either side of neck, no beard; wears ear-rings and necklace; bust ends in four lobes; grenetis. Brahmi legend:—(10 o'clock) 'Varo'.

(2 o'clock) 'Shāhi '.

Rev. :- Fire-altar with double base and triple capital, fillet adorning shaft, surmounted by flames with triangular flanking ornaments; on either side, attendant, facing altar, holds sword at carry, grenetis.

43. (Plate 4) .. British Museum, ex Whitehead, 1922.

Type I(a).

As on Type I but sole legend ' Varo '.

44. (Plate 4) British Museum, ex Cunningham, 1894 published Num. Chron. 1893, Plate

45. XV 7.

British Museum, ex Cunningham, 1894.

46. British Museum, ex Brereton, 1859.

PIROCH.

Type I. A Drachm.

Obv.;—Bust of ruler, facing, diademed, ends of diadem floating upwards from shoulders; wearing crown with three foliate; ornaments each of three plumes; crown adorned with fluted globe surmounting crescent; bushy hair on either side of neck; clean shaven; wears ear-rings, necklace and jewelled collar; bust ends in four lobes; grenetis.

No legend.

Rev.;—Fire-altar with double base and triple capital, fillet adorning shaft; surmounted by flames; on left, attendant, facing altar, holding sword at the carry; on right, ornamental globe resting on symbol like Buddhist triratna, surmounted by flat platform from which palm branches arise; grenetis.

In exergue, Pehlevi legend 'Pirôch'.

47. (Plate 4) ... Author, Hoard III.

48. British Museum, ex Cunningham, 1894, published Num. Chron. 1893,

Type I (a). As on Type I but central foliate ornament on crown omitted.
49, 50. (49 Plate 4) ... Author, Hoard III.

Plate XV 5.

BUDDHABALA.

Type I. A Drachm.

Obv.:—Bust of ruler, facing, diademed, ends of diadem float upwards from shoulders; wearing erown with two outspread wings and central foliate ornament of three plumes; crown adorned with floating fillets and fluted globe surmounting crescent; bushy hair on either side of neck, small moustache, clean shaven chin; wears ear-ring and neck-lace; bust ends in four lobes; grenetis.

No legend.

Rev. :—Fire-altar with double base and triple capital, fillet adorning shaft; surmounted by flames; on either side attendant facing altar with sword at the carry; grenetis. In exergue, Brahmi legend;—'Buddhabala'.

51. (Plate 4)

52. (Plate 4) 53.

Author, Hoard IV. Author, Hoard III.

Parkes Weber Gift, 1906.

ANONYMOUS.

Type I. A Drachm.

Obv.:—Bust of ruler, facing, diademed, ends of diadem float upwards from shoulders, wearing crown with central crenellated ornament surmounted by jewelled dome and flanking foliate ornaments of two plumes; bushy hair on either side of neck, clean shaven; wears ear-ring and necklace; bust ends in four lobes; grenetis.

No legend.

Rev.:—Fire-altar with double base and triple capital, fillet adorning shaft; surmounted by flames in which bust of Hormizd appears to right; on either side, attendant, facing altar, with sword at the carry; grenetis.

No legend.

54. (Plate 5)

.. British Museum, ex Whitehead, 1922.

BHASA.

Type I. A. Drachm.

Obv.:—Bust of ruler right, diademed, ends of diadem float upwards from shoulders; wear flat cap with vertical flutings, surmounted by crescent and globe; bushy hair on either side of neck, clean shaven; wears ear-ring and necklace; bust ends in four lobes; large crescent behind shoulders; grenetis. Brahmi legend (2 o'clock) 'Bhāsa'.

Rev.:—Fire-altar with double base and triple capital fillet adorning shaft; surmounted by flames in which bust of Hormizd appears to right; on either side, attendant facing altar with sword at the carry; grenetis.

55. (Plate 5)

.. British Museum, ex Cunningham, 1894. Published Num, Chron. 1893, Pl. XV, 6.

UNIDENTIFIED SATRAP OF ARDESHIR II.

Type I. A Drachm.

Obv.: Bust of ruler right, diademed, ends of diadem floating upwards behind head; wears close-fitting cap surmounted in front with jewelled globe adorned with fillets; bushy hair behind neck, clean shaven; wears ear-ring, necklace and jewelled collar; grenetis.

Illegible Pehlevi legend.

Rev.: Fire-altar with double base and triple capital, fillet adorning shaft, surmounted by flames in which bust of Hormizd appears to right; on either side, attendant faces altar with sword at the carry; grenetis.

In exergue illegible Brahmi legend.

44 N. Journal of the Royal Asiatic Soc. of Bengal [Vol. III,

56. (Plate 5) ... British Museum, ex Whitehead,

TARIKA.

Type I. Æ Round.

Obv.:—Bust of ruler, facing, diademed, ends of diadem floating upwards from shoulders; wear head-dress surmounted by crescent; clean shaven; wears ear-ring and necklace; bust ends in four lobes; grenetis.

Rev. :-Brahmi legend in two lines :- 'Kshatrapa Tarika', grenetis.

57. British Museum, ex Cunningham,
1894, published Num. Chron.
1893, Plate XV provenance
Bannu.

58. (Plate 5) . . . British Museum, ex Talbot, 1903. . . . Author, provenance Akra, Bannu District.

61. Electrotype in British Museum,
published Rapson (J.R.A.S.,
1903) 'Notes on Indian Coins
Seals', Plate V, 11.

Note —No. 61 being double struck the inscription is not legible. The coin may have been struck by another ruler, though it appears to me to be of Tarika.

Type II. Æ Round.

Obv. :- Head to left, details indistinct.

Rev. :- As on type I.

62. British Museum, ex Cunningham, 1894, published Num. Chron. 1893, Plate XV, 9, provenance

Bannu.

63, 64. Author, provenance Akra, Bannu District.

Type III. Æ Round.

Obv. : Head to right, details indistinct.

Rev.: Apparently as type I.

65, 66. . British Museum, ex Cunningham, 1894.

SADHANI.

Type I. Æ Drachm.

Obv.:—Bust of king to right, diademed, ends of diadem floating upwards behind head; wears ornamental flat-topped crown as shown in the coins of Shapur III; crown adorned with floating fillets and pearly globe; bushy hair, no beard, wears earring and necklace; bust ends in four lobes; grenetis.

Before face, vertical Brahmi legend 'Sadhani'.

Behind head, Brahmi ' Pra '.

Rev.:—Fire-altar with single base and triple capital, fillet adorning shaft; surmounted by flames in which bust of Hormizd appears to right; on either side attendant, facing altar with sword at the carry; grenetis.

.. British Museum, ex Rogers, 1894. 67. (Plate 5) British Museum, ex Cunningham, 68, 69. 1894.

UNIDENTIFIED SATRAP ' A ' OF SHAPUR III.

Type I. Drachm.

Obv.: -Bust of king to right diademed as on coins 67-69, though ornaments on flat topped crown varied and reminiscent of coin 55.

Before face, unread Greek-Kushan legend.

Rev.:—Fire altar with double base and triple capital, fillet adorning shaft; surmounted by flames in which bust of Hormizd appears to left; on either side attendant, facing altar with sword at the carry; grenetis.

.. Author, Hoard IV. 70. (Plate 5) ...

UNIDENTIFIED SATRAP 'B' OF SHAPUR III.

Type I. Drachm.

Obv.:—Bust of ruler to right, diademed, ends of diadem floating upwards behind head, wearing flat-topped crown as shown on the coins of Shapur III; crown adorned with globe and floating fillets; bushy hair, beard appears to pass through ring; wears necklace; bust ends in four lobes; grenetis.

Before face, unread Pehlevi legend.

Rev.:—Bust of ruler (?) to left, diademed; wears pearled coronet; fillet tied into hair at top of head; bearded; bust ends in four lobes, grenetis.

Before face, unread Pehlevi legend.

.. British Museum, ex Cunningham, 1894. 71.

APPENDIX II.

A Stylistic Comparison of the Coins of the Little Kushan Rulers and Satraps.

This comparison has been relegated to an Appendix as a discussion of it would interrupt the argument in the main paper unnecessarily. It has also been reduced to tabular form for clearness.

The first table shows the differentiæ which appear worthy of note.

The second compares the various coins with respect to these differentiæ.

TABLE I.

Reference	Feature		DIFFERENTLE	
	A SPECIAL DESIGNATION OF THE PROPERTY OF THE P	a.	ь.	c.
Α.	Flan of coin.	A Thin,	A Smaller,	Æ ·65*
В.	Direction in which bust	spread fabric. To front	thicker flan. To right	To left.
C.	faces. Chin of por- trait.	Clean shaven.	Bearded, end of beard passed through	****
D.	Emblems sur- mounting	Crescent and globe.	ring. Globe alone.	Neither.
E.	head dress, Fillets on head-dress,	Present	Absent	
F.	Ornamenta- tion on bust.	Shoulders draped with palmettes,	Bust ends in four lobes representing shoulders and chest.	
G.	Obverse legend.	Name and Title.	Name only	2233
H.	Script of ob- verse legend.	Brahmi	Pehlevi	Greek-Kush
J.	Reverse le-	Primary	Secondary	an.
K.	Script of re- verse legend.	Brahmi	Pehlevi	Greek-Ku-
L.	Flames on fire- altar.	Bust of Hor- mizd among flames.	No bust among flames.	shan. Triangular ornament flanking
М.	Fire-altar	Triple base and capital.	Double base, triple capital.	fire. Single base, triple ca- pital.

APPENDIX II.—(Contd.) Table II.

	The section	Reference to			Fe	ature	s diff	erent	inted.	(See	Features differentiated. (See Table I.)	~		
Dynasty.	oder vans	Catalogue.	Α.	B.	0.	D.	E.	4	Ö.	Ħ	Э.	K.	i	M.
Little Kushan Rulers Independent Period	Kidara Type I Kidara Type II Piro Type I Piro Type II Piro Type II Varahrān	15-21 22-25 26-42	र र र र र	ಪಕಕಪಪ	44000	ففففه	तं तं तं तं तं	<u>ज</u> ई ई ई ई	4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	66666	44444	(NH.)	ಕಕಕನನ	नं नं नं नं
Little Kushan Satraps In independent period	Varo Shahi Piroch Buddhabala Anonymous Bhasa Tarika Type I*	43-46 47-50 51-53 54 55 57-61	संस्थ संस्थ	त न न न न न	त न न न न न न	ರಕ್ಕೆ ಬಿಕೆ ಬ	66666	ففففف	A NEW PARTY	교육점점 4월	ं से से उं जे से	N A N N A	999999	Nepep
Satraps under Sasanian Rulers.	Unidentified under Ardeshir II. Sadhani under Shapur III Unidentified 'A' under Shapur III. Unidentified 'B' under Shapur III.	56 67–69 70 71	4 9 4 9	å åå å	d d d 27	۵ ۵۵ ۵	तंतंतं त	غ غغ غ	a, Not Clear Not Clear	ं बंध कं	<u> </u>	e NN q	e e e E	ē 5 ĕ ₩

* Tarika Types II and III are too poorly preserved for a detailed analysis.

APPENDIX III.

Notes on Finds and Findspots of Little Kushan Silver and Copper Coins.

All finds known to the author are listed below. All other coins of the dynasty which he has traced are also listed grouped according to the collections in which they appear. The table shows the composition of each find or group in detail.

List of finds, etc.

I.—Excavated by the Archæological Survey of India at Taxila, vide A.S.R. 1915-16, page 36, item 5.

II.—Excavated by the Archeological Survey of India at Jaimal Garhi, vide A.S.R. Frontier Circle 1920-21, p. 3 and Appendix V item 140, 263 and 264. A Sasanian coin of Varahran IV was found in same block of buildings but not in conjunction with these coins.

III.—Exact provenance not known—purchased by author in Rawalpindi from a petty coin dealer whose other coins all appeared to be of local provenance.

IV.—Exact provenance unknown—purchased by author in Peshawar City.

V.—Purchased by author in Peshawar. The vendor stated he bought them from a cultivator who dug them up in Swabi Tehsil, Peshawar District. He could give me no further information.

Peshawar District. He could give me no further information.

VI.—Exact provenance unknown—purchased by author from a dealer in Rawalpindi.

VII.—In British Museum ex Major Hay, 1860, provenance unrecorded.

VIII.— do. ex W. L. Grant, 1923 do.

IX.— do. ex Col. H.E. Deane 1919 do.

X.— do. ex India Office Collection do.

XI.—In the Indian Museum, Calcutta.

XI.—In the Indian Museum, Calcutta,
Catalogue, Vol. I, Pl. XXIV, 8

XII.—In the British Museum ex R. B. Whitehead,
do.

1922. XIII.do. ex General Cunningham. do. 1894.XIV .-do. Parkes Weber Gift, 1906 do. XV.ex W. S. Talbot, 1903 ex C. J. Rogers, 1894 do. do. XVI.do. do. XVII. do.

XVII.— do. ex Brereton, 1859 do.
XVIII.—Electrotype in British Museum. Provenance and ownership of
original unrecorded.

XIX.—Found by author at Akra, Bannu Dist.

XX.—In the British Museum ex General Cunningham, 1894 provenance Bannu District.

Notes.

To save space finds IX, X and XI have been omitted from the table showing the composition of the various finds. Each contained 1 coin of the independent ruler Varahrān of the type of numbers 26 to 42.

Certain finds contained Sasanian drachms as noted below:—

V 2 of Varahrān IV VI 1 of Shapur III and 1 of Varahrān IV.

		Refer-						0	COMPOSITION OF FINDS.	rrrios	107	INDS.						
Dynasty.	King and Type.	Cata- logue.	1	11	H	IV.	v. v	VI. VI	VII. VIII.	I. XII.	LXI	XIII. XIV. XV.	x .	XVI.	хуп.	хуш.	XIX.	XX.
Little Kushan Rulers. Independent period.	Kidara Type II Kidara Type II Piro Type II Piro Type II Varahrån	1-3 15-21 23-25 26-42	: -:::	: 10 : : :	- 01 : : :	- :-::	: :0-4		: ::0100	325	: ** : : : :	1 ::::	off stotes to	: ::::	: ::::	- ::::	1 1111	: ::::
Little Kushan Sarraps. In indepen- dent period.	Varo Shahi Piroch Buddhabala Anonymous Tarika Type I. Tarika Type II. Tarika Type II.	43-46 47-50 51-53 54 55 57-61 62-84 65-86	: ::::::	1 1111111	: ==:::::	: :=::::::	: :::::::	: :::::::	1 1111111		a - : :- : : :	3 25 11111	: ::::-::	: :::::::	- :::::::	: ::::=::	: :::::::::::::::::::::::::::::::::::::	: ::::===
Satraps under Sasanian Rulers.	Unidentified under Ardeshir II. Sadhani under Shapur III. Unidentified 'A' under Shapur III. Unidentified 'B' Unidentified 'B'	56 67–69 70		## #	11 1	1: -	1.1	and d			-	;e ;		17 1		23 1	11 1	:: :
	under Shapur III.	11	-	1	t	:	10		:		:	-	8	3	-	•	10	1

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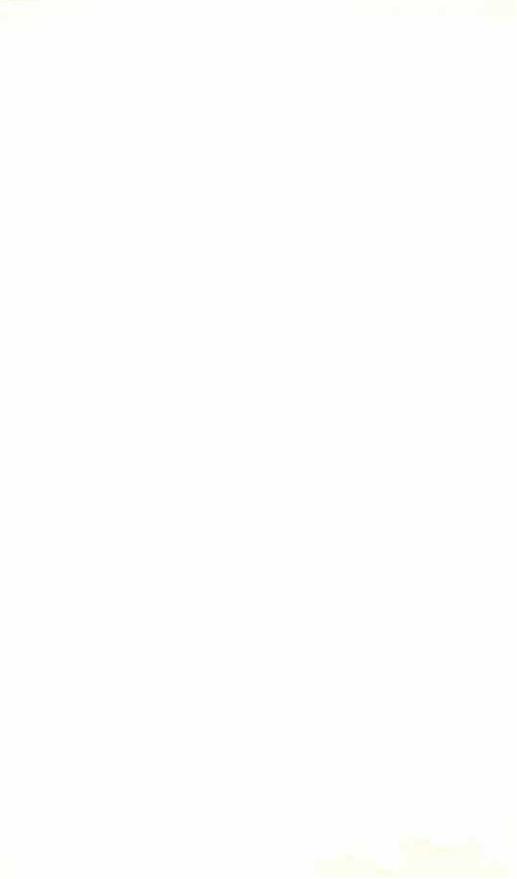
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M. F. C. MARTIN.





Coins of the Little Kushāns.





Coins of the Little Kushāns.





Coins of the Little Kushans.





Coins of the Little Kushāns.





Coins of the Little Kushāns.



OBSERVATIONS ON DIFFERENT TYPES OF SILVER PUNCH-MARKED COINS, THEIR PERIODS AND LOCALE.

My first paper on 'The Classification and significance of symbols on the silver punch-marked coins', published in the Numismatic Supplement No. XLV for 1934, and in the Journal and Proceedings of the Asiatic Society of Bengal, Vol. XXX, No. 3, 1934, was more or less descriptive. Here I intend to

discuss in detail other points.

Since the discovery of Dr. Spooner, and my own finding that the bigger symbols seen on the obverse side of the coins indicate a methodical grouping of symbols, it has become easier now to differentiate and classify them, and find out the coins of the same class bearing the same symbol-groups, which were undoubtedly minted in the same period, as most of them are punched with the same dies. In a group of coins punched with the same group of symbols in a hoard, all the different shapes, such as round, elliptical, rectangular, and square with clipped corners are found as illustrated on Pls. IX to XXI, of my paper published in the Numismatic Supplement No. XLV. The rectangular or round shape is thus no criterion of the chronological period of punch-marked coins, as supposed by some scholars.

Even the coins of the earlier periods as illustrated on Pls. VI and VIII, are found in all the four shapes, although most of the earlier types of coins which are illustrated on Pls. I, II, III and XXXI, in the N.S. No. XLV, and described hereafter, are irregularly round in shape. This latter fact most probably led Cunningham to say that 'the earlier coins are generally thin and broad, of irregular shapes, some are oblong and some are nearly round '1. Numismatists who have handled a sufficient number of silver punch-marked coins would vouchsafe the correctness of this. The coins of earlier periods are broader and thinner, of irregular shape with rounded corners, of a different standard of weight and impressed with a group of only four crudely designed symbols, and rarely of five. The shape of coins was apparently no matter of consideration, in the very early days of coinage; only the weights and symbols were cared for chiefly.

The silver punch-marked coins of comparatively later periods are more geometrical in shapes, being circular, elliptical, oblong, and square, with clear corners, clipped or unclipped, thicker and smaller. They always bear groups of five symbols, showing finer and geometrically correct delineation, and conforming to the thirty-two Rattis standard weight. This is

¹ C.C.A.I., p. 43. (51 N.)

my conclusion from a study of over eight thousand silver punchmarked coins, from my own and other private collections, and from eight different hoards now lying unpublished, and unclassified in the three well known Museums of India.

Another theory that the silver punch-marked coins with blank reverse, or marked with only one or two very small symbols on their reverse, are of earlier period, as compared with those showing three or more symbols. In other words coins punched on their reverse sides with many minute symbols say from three to nine or fourteen are considered to belong to a later date.

This is another incorrect theory still prevailing amongst the scholars; but after the discovery of the fact that the bigger symbols seen on the obverse side of the coins indicate a methodical grouping, the first three of which are common, and the variation of the other two constitutes a series of that particular group, as will be evident from the symbol-groups illustrated on Plates IX to XXI, and also on Pls. I, II, III, IV, V and VI, N.S. No. XLV, which illustrate the groups seen on the coins of the earlier types, in which only the first two are common, the remaining are changed to form their series; this has enabled us now to recognise the coins of the same class which bear the same symbol-groups out of any hoard of coins, and it will be found that some of these similar coins have blank reverse, sometimes showing anvil marks, while others of the same class will show one, two, three or more up to nine small symbols on their reverse.

Coins bearing the same symbol-groups are undoubtedly of the same period and were minted under the same authority or king. The plausible explanation as to why some coins of the same class have blank reverse, and others are marked with a large number of symbols is, that some of the coins of the same class which remained in circulation for a longer time, say for a century or more, bear more marks than those which somehow or other were kept confined and could not come into full circulation and thus escaped being marked many times like the others, till they all reached the hand who last hoarded them. The explanation is further supported by the fact that coins of the same class from the same hoard bearing a large number of symbols on the reverse look much worn, and are lighter in weight comparatively, than those of the same class which are of blank reverse or bear only one or two small symbols. I have found many such instances in several hoards, and I think it is wrong to say that coins bearing none or one symbol on the reverse are of earlier period. One or two instances would not be out of

¹ This supplementary or the second part of the article should be read with the help of the previous one published in the Numismatic Supplement No. XLV for 1934, or the Journal and Proceedings of the Asiatic Society of Bengal, Vol. XXX, 1934.

place here. For example there are several coins of Nos. 54 and 57 in my cabinet as illustrated on Pl. XIV (N.S. No. XLV); one of No. 54 has a single mark, while another bears 7 symbols on the reverse; similarly coins No. 57 have from 1 to 8 marks, and in both the cases the coins bearing a larger number of marks not only look much worn, but actually weigh a little less, the weight of coin No. 54 bearing one symbol is 3185 mgs, the other having 7 marks weighs 2995 mgs, a difference of 190 mgs, or about 3 grains; No. 57 with one mark weighs 3190 mgs, but that which has 8 symbols on the reverse weighs only 2994, and the difference of weights being 196 mgs, or 3.1 grs, although these coins bear the same symbol-group and were obtained from one hoard. I may take another instance from the earlier type of coins illustrated on Pl. XXXI, which were obtained from Mathura fresh from a hoard. These 25 coins are all of one class, bearing the same 4 big symbols on their obverse sides deeply punched, but the reverse symbols varied from one to twelve in number; coin No. 1 which is punched with 12 figures on the reverse weighs 2830 mgs, and looks worn, but coin No. 19 which is marked with only three smaller symbols on the reverse weighs 3017 mgs, being heavier by 187 mgs, or 2.9 grains. This clearly indicates that the coin which was in free circulation for a longer time after being minted has been much worn, and bears more marks of the coin testing-officer or guilders as described in the next paragraph, and most probably the one which bears one or three marks remained somehow or other confined, and did not come into circulation as much as the other one, before reaching the hoard from which they were obtained now, and hence it does not bear more marks. But all of them belong to the same period; as they bear the same symbols, it may be that one was coined a few days or months earlier than the other, and to say that coins having the same group of symbols with blank reverse or bearing one or two symbols are of earlier period than those punched with more on the reverse is misleading.

The reverse have been counted from one to fourteen. They can be divided into two distinct classes:—(1) Minute symbols which are exactly similar to the symbols seen on the obverse side with the groups. (Compare the symbols in the 3rd and 4th columns of Plates XVII to XXI, in the N.S. No. XLV.) They are generally punched singly or with one or two other small symbols, and are commonly found on the reverse of coins of the later or Mauryan period, described later on, as well as on the pre-Mauryan coins, as illustrated on Plate 6 of this

article.1

¹ Symbols seen on the obverse of the coins are marked with capital letters, but the smaller symbols which are found on the reverse of the coins are marked with the same small letters on the plate for reference.

(2) Reverse symbols which are not seen amongst the obverse groups of symbols: These have been punched with two to nine symbols on the reverse (compare the figures in the 3rd and 4th columns of Plates IX to XVII, coins No. 1 to 92 (N. S. No. XLV). What can be the explanation for such small reverse symbols? Do the smaller symbols which exactly resemble some of the conspicuous symbols on the obverse groups carry any special significance ? These are the questions which confront us, and require explanation. Various theories of the punching on the reverse side of the coins have been put forward by previous scholars. Some thought that they are the marks punched by the ancient guilders, others explained them partly to be Mintmarks, and partly marks of the guilders. No doubt the idea of a Mint-mark came from the study of Indo-Greek coins of the 2nd and 1st century B.C. Whether the early Indians knew and put the Mint-marks on the punch-marked coins is a question that has not yet been definitely settled.

Sir Alexander Cunningham in his 'Coins of Ancient India' has described a gold coin 1 excavated from Taxila, bearing on one side the figure of a standing bull facing to left, which he wrongly thought to be a lion, and a figure resembling the Vajra formed by two crescents put on the two sides of a dot and two arrow-heads one above and the other below, on the other side of the coin2; a somewhat similar symbol was seen on the reverse side of some silver punch-marked coins obtained from the same place, illustrated as Figs. 1 and 2 on Pl. II, in his C.A.I. This led Cunningham to think that it may be the mark of Taxila,3 but he was not definite about calling it a mint-mark; besides no other instance of the kind was known to him. On the other hand, it is well known that a particular symbol4 which is first seen on the gold and copper coins of Kadphises II, was then followed by all the great Kushans on their copper and gold issues, even retained by the later Kushans on their coins with a little modification, and after them adopted by the great Guptas with further modifications probably as a royal mark on their gold Dinárs and Suvarnas. Some scholars have taken the symbol to be a 'mint-mark', Vincent Smith has, however, correctly called it 'Monogrammatic Mark'. The idea that some of the small reverse symbols on the punch-marked coins are mint-marks thus remains unsupported, but the theory that they are all guilder's marks is also not fully satisfactroy.

SOME OF THE CONSPICUOUS REVERSE SYMBOLS ARE COIN-TEST-MARKS OF THE EARLY PERIOD :- The study of 1,351 silver punch-marked coins known as the Lotapur hoard of Unao

¹ C.C.A.I., Pl. II, No. 18.

See Fig. 3, Pl. 6, of this article.
 C.C.A.I., p. 61.

⁴ See Fig. 4, Pl. 6, of this article

District, all of the type illustrated on Plate VIII, (N.S., No. XLV), which were sent to me for classification, by the Coin Committee of the Lucknow Museum, brought to light new facts. This led me to think that most of the reverse symbols which are conspicuously seen on the back of a large number of coins in a hoard are the test-marks put after testing the coins by the authority of that period, viz. the Rūpadarśaka, as mentioned by Kautilya (2-12-30). क्पर्शंकः पण्यानां व्यवद्वारिकों कोशप्रवेद्यां च स्त्राप्येत् . . . पारौ चिकमष्टभागिकं णतम्. The examiners of coins 'Rūpadarśaka' shall regulate currency both as a medium of exchange and as legal tender admissible into the treasury '..... One-eighth Panaper cent. be levied as 'Pārikshika' or coin testing charges. It is natural to think that the officer must be putting some test-mark on the coins like the modern Hall-mark on the sterling silver wares, for which he was paid.

In this Lotapur hoard of 1351 coins which are all Half-Purānas or Half-Paṇas of 32 Ratti standard weight, more than one third of the coins are of thinner and broader fabric, and generally of distorted shapes, and liable to break (see Coin No. 4 of Pl. VIII, (N.S. XLV). Some 15 broken pieces of these thin coins were also found in the lot. All these coins being of small size, were punched with a single bold symbol on one side, which should be designated as the obverse side, as many of the coins bearing the same symbols were found in the hoard, the other side was punched with smaller symbols, numbering from one

to nine, without any methodical order of grouping.

The question arises whether all the smaller symbols on the reverse could be the marks of guilders. For instance one of the symbols is the figure of a Fish, which is conspicuous on 885 coins. How could that be the mark of a guilder? It cannot be explained why about two third of the coins in the hoard were marked by the same guilder, and though there were other less conspicuous marks on them along with the fish mark, at the same time it is true that some of the coins had only the single mark of the fish. No definite conclusion could thus be arrived at, but to my mind, the discovery of two peculiarly formed coins in the hoard, Nos. B7 and C45, now in the Lucknow museum 1 was conclusive proof (see Figs. 1 and 2, Pl. 6, of this article). Each of the coins was formed of two separate pieces—a smaller silver piece being mounted on the original broken coin, which bore the obverse symbol, the whole process being done very ingeniously without soldering. On coin No. C45,2 the smaller piece was mounted like a stone on a ring, with small claws cut on the margin of the original broken piece bearing one big symbol

A note on them will be published soon, with illustrations. ² For the illustration of the coin see Fig. 2, Pl. 6, of this article.

on the obverse and bent over the upper smaller piece, the latter being marked by a Nandipada and a turtle. On coin No. B7,1 the extra piece was mounted by turning over the edges of the lower original damaged coin on the four sides to hold the upper piece; a fish symbol occurring on the additional piece. Both the fish symbol and the Nandipada-turtle combination appear to be very popular being found on 64 and 60% of the coins of the present hoard. The most plausible explanation about the two coins is that separate pieces of silver were added to the original damaged coins to make up the loss of their weights, when they came to be tested. The coins were apparently not destroyed or withdrawn from circulation on account of their damaged condition, but mended under official orders and most probably the official marks of the Rūpadarśakas were put on them as a guarantee of their full weight, before they were recirculated. Both the coins now weigh 26.6 and 25.45 grains respectively, which very nearly approaches the average weight of the coins of thinner type in the hoard, which was calculated to be 26.5 grains. This is a practical example showing how the coins were occasionally tested in the early days. Thomas, quoting Manu on this point,2 mentions that weights and measures should be checked every six months, and probably the coins were included as they were determined by the weights.

It need not be pointed out here that the Rupadarśaka was an officer in the service of the king, and not a guilder's man, as is clear from the Arthashāstra of Kautilya 3. The issue of coin was an Imperial concern, under the officer Lakshanādhyaksha, the mint-master of those days, who was not only in charge of the supervision of coin minting department, but was also the officer who knew the Lakshanas, the symbols punched on the coins. The very word Lakshanadhyaksha is indicative of the system of punching symbols on the coinage of the ancient period under

a well organised department.

It becomes clear now that coins which remained in circulation for a considerable period and were cheeked again and again by different officers naturally show a large number of 'testmarks', in the shape of the small symbols on the reverse, sometimes as many as twelve or fourteen. These coins look much defaced and worn, becoming comparatively lighter in weight, and are sometimes found mixed with coins of later period specially with the Mauryan coins described in the next chapter, which had a wide circulation throughout the Mauryan Empire, from one end of the country to another end.

In conclusion it can be said, that most of the small reverse symbols which are conspicuously seen on a large number of coins

¹ For the illustration of the coin see Fig. 1, Pl. 6, of this article.

Manu, Ch. VIII, 403, षट्सु घट्सु च मासेष पुनरेव परीच्येत ॥

^{2-12-30—}Kautilya's Arthshāstra.

in a hoard, are the 'test-marks' put by the Rūpadarśaka after testing the coins. Some of the marks may be due to the guilders, but it looks extraordinary that the guilders would have taken the trouble to mark every coin, when there was already an official system of testing and marking the coins. It may be also noted here that sometimes the small test-marks are by mistake punched on the obverse side, adding to the actual mumber of the 5 symbols of the group, but this does not interfere with the grouping arrangement, and with a little care can be made out distinctly from the regular group of 5 symbols on the ovberse.

II. SOME COMMON SYMBOLS.

As stated before, some of the symbols which are conspicuously observed in the groups on the obverse of the coins, are also seen in a minute form, on the reverse of the coins of the same period, as well as on the pieces of chronologically earlier period, for which some plausible explanation should be found. All such symbols which are seen on both sides are illustrated for the sake of facility on Plate 6 of this article. A few instances would help to clear the above statement.

Figure A, Pl. 6 of this article, which is conspicuously seen on all the coins from 1 to 12 on Pls. I, II and III,² as the first figure of the symbol-groups, on the obverse is also seen like Fig. a, on the reverse of coin No. 1, Pl. I (N.S. No. XLV).

Fig. B, Pl. 6 of this art., the 3rd Figs. in the groups on coins Nos. 1 and 2, Pl. I (N.S. No. XIV) appears as Fig. b, Pl. 6 of this art., on the reverse of coin No. 3, Pl. I; and No. 5, Pl. II (N.S. No. XLV).

Fig. C, Pl. 6 of this art., the 3rd figures in the groups of symbols on coins 3, 4, and 5, Pls. I and II (N.S. No. XLV) is also punched as Fig. c, Pl. 6 of this art. on the reverse of coin No. 10 as the 5th figure, Pl. III (N.S. No. XLV).

Fig. D, Pl. 6 of this art., the 4th Fig. on coin No. 10, Pl. III (N.S. No. XLV) is seen like Fig. d of Pl. 6 of this art. on the reverse of coin No. 6, Pl. II, and also with its face to right on coins 11 and 12, on Pl. III (N.S. No. XLV).

Fig. E, Pl. 6 of this art., seen on the Golakhapur early coins of Magadha, which is the 1st Figure of the groups on all the coins from 4 to 105, on Pls. IV and V (N.S. No. XLV) appears

¹ The capital letters refer to the figures of the obverse side, and the small letters to the symbols of the reverse side on Pl. 6 of this article.
² All such references to plates are meant for the plates illustrated in the Numismatic Supplement, No. XLV or the Journal and Proceedings of the Asiatic Society of Bengal, Vol. XXX, 1934, unless stated otherwise.

as Fig. e, Pl. 6 of this art. on the reverse of coins Nos. 75 and 96, illustrated in the 5th column, Pl. V (N.S. No. XLV).

Fig. F, Pl. 6 of this art., the fourth figures in the groups on coins 4 to 59, Pl. IV (N.S. No. XLV) is impressed like Fig. f, Pl. 6 of this art. on the reverse of the coin No. 105 (N.S. No. XLV).

Fig. G, Pl. 6 of this art., the third figures of the groups on coins Nos. 101 and 102 on Pl. V (N.S. No. XLV) is seen as the reverse symbol like Fig. g, Pl. 6 of this art., on coins Nos. 86 and 103, Pl. IV (N.S. No. XLV).

Fig. H, Pl. 6 of this art., the 5th figures of groups on coins Nos. 43 and 101, Pl. IV, V (N.S. No. XLV) is also punched as Fig. h, Pl. 6 of this art., on the reverse of the coins Nos. 19, 20, and 213, Pl. IV (N.S. No. XLV).

Fig. I, Pl. 6 of this art., the 4th figure of the group on coin No. 102, Pl. V (N.S. No. XLV) is seen as Fig. i, Pl. 6 of this art. on the reverse of coins Nos. 4 and 87, Pls. IV and V (N.S. No. XLV).

Fig. J, Pl. 6 of this art., the 4th figure on coin No. 4 of Pl. VI (N.S. No. XLV) illustrating a third type of coins, is seen as Fig. j, Pl. 6 of this art., on the reverse of coins Nos. 2, 3, 4, and 5, with and without dots on Pl. VI (N.S. No. XLV).

Fig. K, Pl. 6 of this art., the 3rd figures of groups on coins Nos. 1 to 5, Pl. VI (N.S. No. XLV) facing both ways, is punched as Fig. k, Pl. 6 of this art., on the reverse of coin No. 4, Pl. VI, as a small figure. (N.S. No. XLV).

On the other two types of coins illustrated on Plates IX to XXI, the following symbols are noteworthy:—

Fig. L, Pl. 6 of this art., seen as the obverse symbols No. 2 Nos. 25 and 28 in the groups on a good many coins, Pl. IX' Pl. XI Nos. 76 to 80 No. 90 No. 93 No. 118 No. 55 and Pl. XVII Pl. XVII Pl. XIX Pl. XIV Pl. XVI Nos. 24 and 28 No. 141 appears as a reverse symbol on coins Pl. XXI Pl. XI Nos. 76 and 77 Nos. 33 and 37 No. 72 Nos. 87 and 88 Pl. XV Pl. XVI Pl. XVII Nos. 108, 117 and 118 and Pl. XIX Pl. XX (N.S. No. XLV).

Fig. M, Pl. 6 of this art., notably seen as a group symbol on coins Nos. 7 and 10, Pl. IX, Nos. 13, 17A, 19 and 20, No. 32, Pl. XII, Nos. 43, 49 and 50, No. 64, Pl. XIV, Pl. XIX and No. 152, Appears

Fig. N, Pl. 6 of this art., the obverse symbol on coin No. 71 is punched on the reverse of coins $\frac{No. 42}{Pl. XII}$, $\frac{No. 68}{Pl. XIII}$ (N.S. No. XLV).

Fig. O, Pl. 6 of this art., seen on the obverse of coins No. 8 No. 16 Nos. 33 and 36 is seen on the reverse of coins No. 32 Nos. 54, 57 and 61 Pl. XII Pl. XIV No. 92 Pl. XVII (N.S. No. XLV).

Fig. P, Pl. 6 of this art., another conspicuous figure No. 23 Nos. 40 and 41 No. 42 Pl. XII Pl. XIII' on the obverse of coins Pl. XI Nos. 113 to 115, and Nos. 121 to 1 Nos. 121 to 124 No. 89 No. 83 Pl. XVI' Pl. XVII' Pl. XIX No. 92 No. 58 No. 41 also seen on the reverse of coins Pl. XII' Pl. XIV' Pl. XVII No. 113 Pl. XIX, and No. 132A Pl. XXI (N.S. No. XLV).

Fig. Q, Pl. 6 of this art., a peculiar symbol seen on the obverse of coin $\frac{\text{No. }114}{\text{Pl. }XIX}$, is found impressed on the reverse of $\frac{\text{No. }41}{\text{Pl. }XII}$, $\frac{\text{No. }92}{\text{Pl. }XII}$ and $\frac{\text{Nos. }111,\ 113,\ 114\ \text{and}\ 115}{\text{Pl. }XIX}$ (N.S. No. XLV).

Fig. R, Pl. 6 of this art., so conspicuously seen on the obverse of a large number of coins $\frac{\text{Nos. 3 to 6}}{\text{Pl. XI}}$, $\frac{\text{Nos. 12, 14, 17 and 18}}{\text{Pl. X}}$, $\frac{\text{Nos. 22, 29 and 30}}{\text{Pl. XI}}$, $\frac{\text{Nos. 34, 35 and 38}}{\text{Pl. XII}}$, $\frac{\text{Nos. 45 and 51}}{\text{Pl. XIII}}$, $\frac{\text{No. 54}}{\text{Pl. XVII}}$, $\frac{\text{No. 102}}{\text{Pl. XVI}}$, $\frac{\text{No. 102}}{\text{Pl. XVI}}$, $\frac{\text{No. 127}}{\text{Pl. XXI}}$, is seen on the reverse of a few coins $\frac{\text{No. 54}}{\text{Pl. XIV}}$, $\frac{\text{Nos. 88 and 90}}{\text{Pl. XVII}}$ (N.S. No. XLV).

Fig. S, Pl. 6 of this art., a prominent symbol seen on the obverse of later coins $\frac{\text{Nos. }105 \text{ to }107}{\text{Pl. XVIII}}$ and $\frac{\text{No. }134}{\text{Pl. XXI}}$

is punched on the reverse of coins Nos. 72, 73 and 47
Pl. XV

Nos. 100, 101, 105 and 106, No. 134
Pl. XXII (N.S. No. XLV).

Fig. T, Pl. 6 of this art., another conspicuous symbol seen on the obverse of two types of coins $\frac{\text{Nos. 70 to 74}}{\text{Pl. XV}}$, $\frac{\text{Nos. 75 and 75A}}{\text{Pl. XVI}}$, $\frac{\text{Nos. 93 to 96}}{\text{Pl. XVII}}$, $\frac{\text{Nos. 97 to 105}}{\text{Pl. XVIII}}$, $\frac{\text{Nos. 135 and 136}}{\text{Pl. XXII}}$ and $\frac{\text{No. 149}}{\text{Pl. XXXII}}$, is found punched on the reverse of both the types of coins $\frac{\text{Nos. 70 to 74}}{\text{Pl. XVII}}$, $\frac{\text{Nos. 95}}{\text{Pl. XVIII}}$, $\frac{\text{Nos. 135 and 136}}{\text{Pl. XXII}}$ and $\frac{\text{No. 149}}{\text{Pl. XXXII}}$ (N.S. No. XLV).

Fig. U, Pl. 6 of this art., an early symbol seen on the obverse of coins

Nos. 97, 98 and 99

Pl. XVIII

Nos. 199 and 103

Pl. XVIII

Nos. 125, 127 and 128

Nos. 135, 136 and 143

Pl. XXI

Pl. XXI

Pl. XXI

Fig. V, Pl. 6 of this art., one of the most common symbols, seen generally in the hoards as an obverse symbol on Nos. 93 to 96 Nos. 97 to 107 Nos. 108 to 119 coins Pl. XVIII Pl. XVII PL XIX , No. 143 and Nos. 148 and 149 Nos. 120 to 131 No. 143 is seen punched Nos. 5 and 8 of a minute size on the reverse of coins Pl. IX Nos. 22, 23 and 26 Nos. 32, 34 and 35 Nos. 44, 45, 46 and 51 Pl. XI Pl. XII Pl. XIII Nos. 54, 56, 60, 62 and 63 No. 71 No. 83 Nos. 87, 88, 92 and 96 1 Pl. XIV Pl. XV Pl. XVI Pl. XVII No. 108 Nos. 123, 125 and 127 Nos. 137 and 140 and (N.S. Pl. XIX Pl. XXI Pl. XX No. XLV).

This should not be taken as a complete list, there may be other symbols which will be seen punched on both the sides of other coins not included in the illustrated corpus; other classes

Coins from Nos. 1 to 92 are chronologically earlier than Nos. 93 to 138 as explained hereafter.

of coins with different symbol-groups will be found punched on the reverse with symbols already described above.

We may now see whether there is any significance attached to particular symbols being punched on both sides of some

coins.

Let us take for instance the last symbol described above, Fig. V, Pl. 6 of this Art. the simple form of 3 arches one placed over the other two with a base line and a crescent on top, which was described by previous scholars as the figure of a Chaitya of the Buddhists, to which it has no resemblance, but later it was described by Bhagawanlal Indraji as the Meru Hill.

But some modern scholars count it as the representation of a hill with a crescent on its top. The symbol was first mentioned by me to be connected with the Mauryas, as I found it on half a dozen remains of definitely known Mauryan monuments, as well as on many cast copper coins dug out from the Mauryan

levels at different ancient sites, as described below :-

(1) The hill-with-a-crescent symbol is seen on the well

known Sohagaurā cast-copper-plate, one of the earliest known inscriptions, now in the Indian Museum, Calcutta. Several descriptions of it have been published by various scholars at different times, in the Proceedings of the Asiatic Society of Bengal, 1894, p. 44; in the Indian Antiquary of 1896; in the Journal of Royal Asiatic Society of 1907; in the Journal of Behar and Orissa Research Society, Vol. VI, p. 203, and in Vol. X, p. 189; with different interpretations, but all agreeing to assign it a place between the period of 320 and 300 B.C., i.e. in the pre-Asokan period. The latest description by Dr. K. P. Jayaswal published in the Epigraphia Indica, Vol. XXII, shows that it was a notice put on the thatched granaries specially built in the time of drought or famine, for the distribution of grain, etc. amongst the tenants. The plate bears the hill-with-a-crescent symbol, on the top of the lines as the central figure, (see Fig. I, Pl. 7 of this article), along with the other symbols, which are also found on silver-punched coins. This symbol (3-arched-hill-with-acrescent) is conspicuous on a large number of silver punch marked coins, found from one end of the country to the other, including Afghanistan and Ceylon, which I had secured from 18 different places 1 situated far apart, and also occur in several large hoards now in the Patna and Lucknow Museums, which I date in the same period as the Sohagaura Plate of 320 to 300 B.C. in the time of Chandragupta Maurya. This conclusion I pointed out in an article on 'the silver punch-marked coins and their age 'published in a private booklet read before the Numismatic

¹ See notes in the 6th column opposite coin, No. 128, Pl. XX, Num. Suppl. No. XLV, and J.P.A.S.B., Vol. XXX, 1934.

Society's Meeting held at Delhi in 1931. The idea was further supported by the chemical quantitative analysis of the coin bearing the hill and moon symbol 1 which tallied very nearly with the ingredients of the silver coins described by Kautilya in his Arthashāstra 2, and the prevalence throughout the country

of that particular class of coin.3

- (2) The same hill-and-moon symbol is also seen engraved on the base of the sand-stone polished pillar, excavated by Dr. Spooner 4 in 1912 at a depth of about 15 feet at Kumrahar, (Patna), as illustrated on Pl. 7, Fig. 2 of this article. The monolith was found lying in an inclined position, without any capital, and without any inscription on it, as generally found on Asokan monoliths. In the words of Dr. Spooner 'The base itself is carefully smoothed but not polished, and bears a number of interesting symbols and Masons'-marks, amongst them a set of three rows of three circles each, is conspicuous, and also the symbol 8; I am unable to offer any explanation of this symbol which I believe has long been familiar in India. One point of interest in regard to it may, however, escape notice and that is that very similar marks occur on certain of the Achæmenian monuments of early date'. But he neither noticed nor described the figure of a flag-staff of ancient days (which are seen cut in stone on the gates of the main stupa of Sanchi) nor the symbol of the hill-with-a-crescent engraved very prominently in the centre of the base. The presence of this symbol on the unexpected lowermost part of the pillar is not without its significance. The pillar is not Asokan, but of an earlier date, and scholars are now inclined to believe it to be connected with Chandragupta Maurya, although Dr. Spooner could not decide whether it was erected by Asoka or Chandragupta. Some scholars think it to be the remains of Chandragupta's Hall of Audience.
- (3) A small matrix bearing the same symbol of a threearched-hill and a crescent (Pl. 7, Fig. 3 of this art.) was also dug out from 18 feet below the surface from the same site at Kumrahar.⁵
- (4) Three terracotta dishes impressed with a seal in the centre bearing four symbols (Figs. 1 and 2, Pl. 8, of this art.) were excavated by Rai Sahib Manoranjan Ghosh at Bulandibagh from the Mauryan level of 15 to 18 feet, along with a large number of square or rectangular cast copper coins (Figs. 3 and 4,

Silver 68-5 parts, copper with lead and other base metal 31-5.

² जनवाधनयतुभौगताचं क्यक्पं तीत्र्णवप्रमीमाञ्चनानमन्यतमं भाषवीजयुक्तं कारयेतः।

³ See Num. Suppl., No. XLV, Pl. XX, coin No. 128, for symbol group and its find places in the 6th column.

A.S. of India, A.R., 1912-13.
 A.S.I. Report 1912-13, Pl. XLIX, No. 10.

Pl. 8, of this art.) 1 scattered here and there exactly alike the two cast copper coins excavated at Sarnath from near the base of the Asokan Pillar, which also bear the two similar symbols of the hill-with-a-crescent, and the hollow cross like figure

Plate 6, Fig. 8 of this art. (with an elephant, a swastika,

a tree in railing, a Nandipada or the Brahmi ma, and a flag standard).2 These dishes were exhibited at the annual meeting of the All India Numismatic Society in December 1933, at Baroda by Dr. K. P. Jayaswal, and explained by him to be of the Mauryan period, bearing the seal of the king.

Attention is specially drawn to the two symbols the hill with a crescent and the hollow cross described above which are also seen on the terra-cotta dishes, and also on the rectangular cast copper coins excavated from Bulandibagh (Patna) and

Sarnath.

But the two cast copper coins bearing also the same two symbols with others described above which were dug out at Sarnath from near the Asokan Monolith, one from 1' 8" above and the other 1' 3" below the Asokan level there, according to the calculation of Mr. Ramaprasad Chanda in 1927 were pronounced by him to be of the Sunga period. It is curious that he did not take into account the depth of their finding in the Asokan level according to his own calculation, and wrongly assigned them a later date of 2nd century B.C., about a century later. The coins are undoubtedly of the Mauryan period, which is further corroborated from the find of a large number of exactly similar cast copper coins at Bulandibagh from the Mauryan level.

The interpretation of the seal impressed on the terra-cotta dishes, bearing the two particular symbols along with others described above, is that the seal is of the Mauryan period, and most probably they are the imperial marks, the Narendranka or the Rajanka of the Mauryan king, and the dishes in the opinion of Dr. K. P. Jayaswal were in the use of the Mauryan

army.

The system of putting the imperial marks on the imperial properties was well in practice in the time of the Mauryan kings, which is clearly established from the Arthashastra of Kautilya; he says in line 249 of Chapter 3, part V :-

कतनरेन्द्राङ्कं मस्तावरणमायुधामारं प्रवेमयेत्।

Sarnath excavations by Mr. Ramaprasad Chanda.

¹ The terra-cotta dishes and the coins are all in the Patna Museum, and I am indebted to Dr. K. P. Jayaswal who showed it to me and kindly supplied me with the photographs of the dishes.

2 See figs. 3 and 4 of Pl. 8 of this Article. A.S.I.R., 1927-28,

The arms and the allied objects are to be marked with the imperial-mark, and kept in the magazine (Ayudhagara); again in Part 2, Chapter 29, Pr. 46, he says:

परपद्मनां राजाङ्केन परिवर्तयिता रूपसा पूर्व साइसद्खं द्थात्।

'When a person substitutes an animal bearing the royalbrand for a private one, he shall be punished with the first amercement'.1 This shows clearly that the royal cattle were branded with king's-mark, the Rājānka, just as is done in modern times; the bullocks and horses of the cavalry being branded in British India. The British Government Mark of an arrow-

head standing on a capital I, I is impressed on every article of the Government of India, from a small steel-nib to swords and fire-arms like pistols, or big machine guns. The well known British Coat-of-arms depicted by a lion and a unicorn standing on the either sides of a shield with a crown is always seen impressed on the government stationery, publications, buildings, and even on the copper coins of 1835 and 1858.

To what Mauryan Emperor do these terra-cotta dishes and the cast-copper coins bearing the two particular symbols the hill-with-a-crescent, and the hollow-cross or square-cross belong? An answer to this question is attempted below :-

(5) A polished monolith with Aśoka's edicts engraved on it was dug out at Rampurwa, with a lion-capital in 1910. The lion capital is now kept in the entrance hall of the Indian Museum at Calcutta, and a big solid copper bolt about 25 inches long and over 41 inches in thickness tapering at the two ends which originally connected the capital with the monolith is also preserved there mounted on the wall just behind the lion capital.

On the copper bolt are engraved in dots with a fine pointed punch four symbols. (Fig. 5, Pl. 8 of this article) 2 three of which are like those seen on the Bulandibagh terra-cotta dishes, and the rectangular cast copper coins described above. Only the figure of a small square as seen on the terracotta dishes is missing. but in its place is a Nandipada, along with another indistinct figure, to the left.

I do not think it a far fetched conclusion to say that the east-copper coins and the terra-cotta dishes which also show two of the symbols, viz. the hill-with-a-crescent and the hollow-

considered penal—Author.]

2 I am indebted to Mr. N. G. Majumdar, Superintendent, Indian Museum, Archæological Section, Calcutta, for kindly supplying me with

the impression of symbols on the copper bolt.

¹ [The proper translation would be 'One who substitutes others' animals by the royal brand'. The unauthorized use of the royal mark is

cross, as on the copper bolt of the Asokan period, belong approxi-

mately to the same period.

As stated before, the silver punched coins bearing the simple three-arched-hill-with a-crescent symbol among others in a group, are probably of the period of Chandragupta, as well as the cast copper round and square, and the die struck coins of Magadha and Gandhara (Taxila) are also to be attributed to him. Those illustrated in this Art. on Pl. 9, Figs. 1 to 10, are all Chandragupta's N.-Western coins; and those on Pl. 10, Figs. 1 to 4, of this art. are his Eastern issues. (Also see C.C.A.I., Pl. II, Figs. 1, 2, 6, 7, 8, 9, 11, 12, 13, 14, 17, 19; Pl. I, Figs. 24 to 27 and 29.) It may be objected (1) that the symbol of the hill-with-a-crescent on the Songaura plate may be the mark of some officer, (2) that the symbol engraved on the base of the Kumrahar pillar may be a mason's mark, like the other marks, such as the 3 arrow heads, the nine small circles, and 3 straight lines, probably indicating the orientation and location of the pillar in the buildings, (3) that the hill-with-acrescent symbol on the cylindrical matrix may be the mark of a private person; (4) the same symbol seen on the Bulandibagh terra-cotta dishes may be the potter's mark; and (5) the engraved figure of the hill-with-a-crescent on the copper bolt of Rampurwa may have been the copper-smith's mark. But the question arises as to how could the very same symbol can be the mark of an officer, a mason's mark, the mark of a private person, a potter's mark and a copper-smith's mark, when it is conspicuously seen on a large number of silver punch-marked coins, as well as on several types of east-copper and die-struck coins of Magadha and Gandhara (Taxila), both under the sway of Chandragupta Maurya.

The most plausible explanation of the above mentioned facts then seems to be that the symbol of the hill-with-a-crescent which was known in the early days was adopted by Chandragupta Maurya as his imperial mark, the Narendranka or Rajanka mentioned by Kautilya, and is seen on his monumental remains, as the system of marking the imperial properties with his Rājānka was the practice of the period. The symbol it seems became the dynastic mark, as it is also seen on the Asokan monuments and coins, it appears also on the signed coins of Dasaratha 1 the Aśoka used the same symbol with an grandson of Aśoka. addition of the figure of the hollow-cross (Fig. 8, Pl. 6 of this art.) as both appear together on his monuments like those seen on the copper bolt of the Rampurwa monolith, Kumrahar terra-cotta dishes, and a large number of rectangular and round cast-copper coins found on the ancient sites of Magadha and

¹ The signed coin of Dasaratha is, illustrated in C.A.I., Pl. III, Fig. 5 which was first read and identified by Dr. K. P. Jayaswal published in the J.B.O.R.S., Vol. XX, of 1934 with illustrations on page 285.

Gandhāra (Taxila) illustrated in this article on Pl. 8, Figs. 3

and 4 : Pl. 10, Figs. 5 1 and 13.2

The theory that the hill-with-crescent symbol was connected with the emperor Chandragupta Maurya, was also confirmed by Dr. K. P. Jayaswal who identified it as the monogramatic Rājānk of Chandragupta in his Presidential Address in the Seventh Indian Oriental Conference held at Baroda in December. 1933.

While surveying the work done during the year he referred to my identification of Chandragupta's silver punch-marked coins, bearing the hill-and-crescent symbol and as a further support of the theory gave a very befitting explanation of the story of the Greek writers referred to by MacCrindle in his famous book 'The invasion of India by Alexander the Great' about Chandragupta, that he was licked by a lion while asleep in a jungle, where he fled to save his life from the wrath of the Nanda king the Nandrus of the Greek writers, and that a wild elephant mounted him on its back, when he got awake. story was naturally rejected by the historians as a myth. But Dr. Javaswal very plausibly explained the story which originated from Chandragupta's die-struck Karshapana coin of Taxila bearing the figure of a standing lion with protruding tongue in front of the hill-and-the-crescent symbol as if licking it, and an elephant with the same symbol over its back, as illustrated on Pl. 9, Fig. 4, of this art.3 The story most probably originated in Taxila on the basis of the coin, just as the origin of the Muhammadan story of Alexander's having a horn originated from the head-gear on his coins. The people knew the hill-andcrescent symbol as the Rājānka of the great emperor, and took this figure on the coins representing Chandragupta symbolically. The recognition of the Rājānka of Chandragupta, enabled the writer to identify the cast and die-struck copper coins, as well as the silver punch-marked coins of Chandragupta with some certainty as illustrated m this article on Pl. 9, Figs. 1 to 10 and Pl. 10, Figs. 1 to 4 4 of Magadha, Vidiśa and Gandhara. The identified cast copper and silver coins of Aśoka, bearing the two symbols, the hill-and-crescent figure and the hollow-cross, are illustrated on Pl. 8, Figs. 3 and 4 and Pl. 10, Fig. 5 of this art.5 A bronze passport, Mudrā of Aśoka, bearing the hollowcross is also shown as Fig. 13, Pl. 10, of this article, it is not a coin and was obtained from Kosambi.

² See C.C.A.I., Pl. I, Fig. 28; Pl. II, Figs. 15, 16 and 20; and Pl. III,

¹ Fig. 5, Pl. 10 of this art. is a Bronze Passport (Mudra) of Aśoka obtained from Kosambi.

See C.C.A.I., Pl. III, Figs. 1 and 2.
 C.C.A.I., Pl. I, Nos. 25, 26, 27 and 28; Pl. II, Nos. 1, 2, 6, 7, 8, 9, 11, 12, 14, 17 and 19.

⁵ C.C.A.I., Pl. I, Fig. 28, Pl. II, Figs. 15, 16 and 20; Pl. III, Fig. 6.

It may be pointed out here that the hollow-cross symbol is not seen on the silver punched coins; probably it was not used on the silver coins of Aśoka, but a peacock takes its place with the hill-and-crescent figure.

Carlyle 1 noticed the figure of a peacock engraved on the Asokan pillar of Lauriya Nandangarh, which he took to be the

roval mark of Aśoka.

The peacock and the hill-and-crescent symbols are seen on some silver punched coins on both sides which can be attributed to Aśoka ² illustrated on Pl. 10, Fig. 12 of this article.

THE HILL-AND-CRESCENT SYMBOL AS A REVERSE FIGURE.

Some of the pre-Mauryan coins which do not show any of the said recognised Mauryan symbols, are found to be punched on their reverse side with the hill-and-crescent symbol in a minute form, like some of the Mauryan silver punched-coins which also bear the same small mark on their reverse. The explanation of this observed fact comes in a simple way. The silver punched coins of the Nandas and earlier kings, the predecessors of the emperor Chandragupta, must have been in currency when he succeeded to the large empire of the Nanda emperors. According to Greek historians, when Alexander reached the river Hyphasis (Beas)3 he heard that the boundary of this empire was at a distance of ten days march or say about 150 miles from the said river. The current coins of the period of the Nandas, whom Chandragupta defeated, were not destroyed in one sweep throughout the empire, but must have remained in currency, along with the new punched-coins of Chandragupta.

And when all these coins of the preceding kings, together with the Mauryan coins, came to be checked and tested for their weights by the Rūpadarśaka, as was the practice in those days, they were punched on the reverse, with the hill-and-crescent symbol, the Rājānka of the emperor Chandragupta in his time. Many such coins are seen in several hoards; there are some thirty coins of different symbol-groups, all pre-Mauryan, in my cabinet, as illustrated in the corpus published in the Numismatic Supplement, No. XLV for 1934, and J.P.A.S.B., Vol. XXX. Coins Nos. 6 and 8, Pl. IX; Nos. 22, 23 and 26, Pl. XI; Nos. 32, 34 and 35, Pl. XII; Nos. 44, 45, 46 and 51, Pl. XIII; Nos. 54 56, 60, 62 and 63, Pl. XIV; No. 71 of Pl. XV; No. 83, Pl. XVI; Nos. 87, 88 and 92, Pl. XVII; Nos. 137 and 140, Pl. XXI, all these are put under the category of pre-Mauryan coins, and

² See coin Nos. 105, 106, and 107 on Pl. XVIII, (Num. Suppl., No. 1 A.S.I., Report 1877-80. XLV). 3 Cambridge History of India, Vol. I, p. 372.

are seen punched on their reverse with the hill-and-crescent symbol.1

Similarly the identified Mauryan coins illustrated on Pl. XVII, No. 96; Pl. XIX, No. 108; Pl. XX, Nos. 123, 125 and 127 (N.S., No. XLV) are also found punched on their reverse with the symbol of the hill-and-crescent, which was probably used by the Rupadarsaka as the imperial mark for punching on tested coins in Chandragupta's time, on his as well as on the current coins of the preceding kings of Magadha. This seems to be the most plausible and natural explanation of the symbol, the Rājānka being punched on the reverse of the coins of Mauryan

and pre-Mauryan coins both.

It may be objected that the hill-and-crescent symbol is also seen on a large number of silver and copper coins of the Western Satraps of the 2nd and 3rd century A.D. How could the symbol be taken as the Rājānka of the emperor Chandragupta? The explanation again is naturally simple, and is derived from a careful study of the post-Mauryan coins of the Hindu kings from the 2nd century B.C. down to the 3rd century A.D. of Northern and Southern India. The hill-and-crescent symbol being adopted as the Rājānka by Chandragupta in the beginning of the 4th century B.C. continued as the dynastic symbol on the Mauryan coins for several generations as described before, and was conspicuously the chief symbol on the currency of the period, having had a very wide circulation in the biggest empire in India, and thus persisted with some modification even on the coins of the Sunga kings, and others who succeeded the Mauryas. The copper coin of Bahasatimita (Brhaspati Mitra) bears the same symbol of the 3 arched hill-and-crescent standing on a railing with a Nandipada on its top in place of the crescent (see Fig. 6, on Pl. 10, of this article).2

The coins of Pushyamitra, and Agnimitra of the Sunga dynasty retained the same hill symbol, but without the crescent, as described and illustrated by Dr. K. P. Jayaswal in the J.B.

& O.R.S., Vol. XX, Parts III and IV of 1934.

On the silver and cast-copper Kuninda coins it was further modified into a hill of 6 arches of 3 stories with a Chhatra on top, as illustrated on Pl. 10, Fig. 7 of this article.3

On the cast copper coins of Kosambi with the lanky bull, it appears as a bare hill of 6 arches in 3 tiers as in Fig. 10, Pl. 10,

of this article.4

We see the same symbol further modified on the lead and potin coins of the Andhras of the south. Gotamiputra Vilivava-

¹ See reverse symbols in the 4th columns of the plates referred to above.

² C.C.A.L., Pl. V, Fig. 11. C.C.A.I., Pl. V, Figs. 2 and 3.
 C.C.A.I., Pl. V, Fig. 7.

kura has a hill of 10 arches of 4 tiers with a Swastika on his coins (see C.C.A.I., Pl. XXI, 6). Gotamiputra Śri Yajña changed it into a hill of 6 arches of 3 tiers, with a crescent on its top, and added a conch and a flower on either side of it, with a wavy line below, on his silver and lead coins, as illustrated on Pl. 10, Fig. 9 of this article.

On the coin of Mulanda it is seen as a hill of 8 arches of 3 tiers the topmost being bigger, as illustrated on Pl. 10, Fig. 8

of this article.

The Western Satrapas adopted the same symbol in its original simple form of the 2 arched hill-and-crescent with a further addition of the sun and crescent on the right and left side of it with a wavy line below, representing a river; an illustration of the silver coin of Rudradāman I, son of Jayadáman dated Saka 87 (A.D. 165), is given on Pl. 10, Fig. 11, of this article.

The symbol continued for about a couple of centuries on the Satrapa coins of Malwa and Gujarat till the rise of Chandragupta Vikramāditya, who replaced the hill-and-crescent symbol with his Garuda emblem on his silver coins of the same type, when he conquered Malwa and the symbol of the hilland-crescent disappeared for ever, having persisted for over six centuries in various forms on the silver, copper, lead, and potin coins of northern and southern India. Several such examples of a symbol or figure persisting for centuries on the coins of various kings in different parts of the country are known in the Indian Numismatics, for instance the symbol probably representing the Rājānka of the Great Kushans seen on their Dinars. Fig. 4, Pl. 6 of this art. continued for several centuries on the coins of the Great and later Guptas. The Horse-man and the couchant Bull seen on the coins of the Brahmana King of Ohind and the Kabul Valley, continued somewhat modified on the coins of the Tomar dynasty of Ajmer, the Rathaurs of Kannauj, the Chauhans of Delhi, and the Narwar kings who imitated the same figures on their coins, even the billon coins of Mahammadbin-Sam, Altamash and his successors bear the same figures. It appears that the moon-on-hill symbol existed in a slightly different form before the Mauryans came to power who adopted it as the royal mark, giving it a definite form of a 3-arched hill with a crescent on its top. It is seen as 3 arched doors adjacent to each other, the middle one being the bigger of the two, and topped with a crescent on the early copper punched coins of Rajgir of the 100 Rattis weight of the time of Bimbisara the father of Ajātaśatru the contemporary of Buddha, as illustrated on Pl. 9, Fig. 11, as Fig. 5, Pl. 6, of this article. There is a clear mention of it in the early Buddhistic Attha-Kathā :-

तदा राज्यमन्ने बींसतिमासको कन्नाययो न्नोति। तस्रात् पंचमासको पादो।

¹ C.C.A.I., Pl. XII, Fig. 9.

² Attha Kathā Vinaya Piţaka II Parágika.

In the city of Rājagaha (Rajgir) Kārshāpanas of 20 Māshakas 1 or 100 Rattis were prevalent, and a Pāda of 5

Its other form on the probably pre-Mauryan silver punchedcoins is somewhat like the above described figure of 3 arched gates standing separately, the middle one being the bigger of the two, but without a crescent, as illustrated on Pl. 9, Fig. 13; like Fig. 6, Pl. 6 of this article.

Its third modified form on silver punch-marked coins is " seen enclosed in another arch without any crescent but standing on a tank containing two swimming fishes, with a Damaru on the top of the enclosing arch, as is seen on the silver coins of pre-Mauryan type illustrated on Pl. 9, Fig. 12; like the Fig. 7, on Pl. 6 of this article.

Fig. S, Pl. 6 of this art. The figure of a peacock perched on a hill, has been already described, it seems to be connected with Aśoka, see coin Fig. 12, Pl. 10, of this article. His other silver coins bearing other symbols have not been identified as yet. Similarly the silver punched-coins of Bindusara his father

is awaiting identification.

It would not be in vain to search them out of the coins illustrated in the Numismatic Supplement No. XLV, on Plates XVII and XVIII from amongst the coins Nos. 93 to 104.

Another conspicuous symbol Fig. T, Pl. 6 of this art., described as bales of cotton by Cunningham and Caduceus by Theobald, appears on the obverse of pre-Mauryan coins, but it reappears with the hill-and-crescent symbol on the coins of the Mauryan period, and is also seen on the reverse of the Mauryan coins only. Whether it was reintroduced by Chandragupta or Bindusara or Asoka on the coins, is difficult to say in the present circumstances of our scanty knowledge about the symbols.

It will be seen by the study of the group-symbols of the Early, the Middle period and Mauryan coins, that some of the symbols seen on the Mauryan coins were quite new which never appeared on the Early or the Middle period coins, while some are exactly similar to those which were punched on the coins of the

Middle period and the Early coins.³

Fig. A, Pl. 6 of this article is another pre-Mauryan symbol which appears on the obverse and reverse of pre-Mauryan coins

but has not been seen on the Mauryan coins.

Fig. B, Pl. 6 of this article is another noteworthy symbol, and is one of the earliest figures known on the punched coins. I have not seen a single hoard of early or later period coins in

² Described in the next Chapter of this article.

¹ The Mashaka was a copper coin of 5 Rattis mentioned by Kautilya and Manu.

³ Compare the symbol groups of Pls. XVIII, XIX and XX with those illustrated on Pls. I to VIII and IX to XVII of N.S. No. XLV, or J.P.A.S.B., Vol. XXX.

which the symbol is not seen either as a single figure or in combination with compound symbols. The only exception is the lot of 33 bent-bars, Salākās of 100 Rattis weight found with other 1,173 pre-Mauryan coins and the drachm and tetra-drachm of Alexander, excavated from the Bhir mound, the earliest site at Taxila, by Sir J. Marshall in 1924-25.

This figure was designated as the Taurnie symbol by previous scholars, but Sir J. Marshall calls it the Nándipada, and Dr. Jayaswal thinks that it may be the Brahmi 8 M on the Mauryan coins as it appears inverted like Fig. 9, Pl. 6 of this art. on their cast copper coins similar to the letter M on some of

the Asokan inscriptions.

In what sense it was actually used in the very early days of the Buddha and perhaps pre-Buddha times is difficult to say at present. A careful survey of all the symbol-groups as stated above will show the truth of the statement. It seems to be one of the earliest symbols which survived for a long time but is now forgotten.

III. SILVER PUNCH-MARKED COINS OF DIFFERENT PERIODS AND LOCALITIES.

In the first part of my article published in the Num. Suppl. No. XLV, and J.P.A.S.B., Vol. XXX, silver punched coins have been divided into three periods, and tentatively designated there as the coins of the *later*, middle, and early periods. The terms and divisions need explanation and elucidation with facts and figures.

It is a well-known fact that the system of manufacturing inscribed coins of silver and copper cast or die-struck, bearing the name of the King in the genitive form came in vogue, in Northern India most probably after the Indo-Greek system of coinage from the 3rd quarter of the 2nd century B.C., though the punched coinage continued up to the 3rd century A.D., and in the Deccan their gold coins 2 with or without legend with punched symbols are known up to the 9th century of the Christian era. In the opinion of some scholars the silver-punched coins were minted so abundantly in the 3rd century B.C., that they remained in currency up to the 1st or 2nd century A.D. in the Northern part of the peninsula.

A large number of copper and some silver inscribed coins were published long before by Sir A. Cunningham in his coins of Ancient India. Most of them have been read and identified to be the coins of the last quarter of the 2nd and beginning of the 1st century B.C. of the Sunga Kings who succeeded the Mauryas,

Archæological Survey of India Report, 1924-25, Pl. IX.
 A gold punch marked coin of the Deccan is illustrated on Pl. 11,
 Fig. 7 of this article, note the legend at the bottom side.

by Dr. K. P. Jayaswal both on the basis of palæography and the Pauranic records of dynasties which are now recognized by most of the Western scholars like Rapson, Rhys Davids, Pargiter and others. It should not be understood that the inscribed coins were first introduced in the last quarter of the 2nd century B.C. in the country. The system of minting inscribed coins was known in the time of the Mauryas specially on the copper coins, or even earlier in the N.W. part of India, as is evident from the copper coins illustrated in C.C.A.I., Pl. II, Figs. 17, 21 and 22; and Pl. III, Figs. 5, 8, 9, 10, 11 and 13 of which the coins No. 17. Pl. II, and No. 5, Pl. III are undoubtedly Mauryan as they bear the simple figure of the hill-and-crescent. These coins have been read, identified and published by Dr. Jayaswal in the J.B. & O.R.S., Vol. XX, of 1934 and also mentioned in the J.R.A.S. of October 1935, to be the Mauryan coins of the N.W. parts of the country.

The punch-marked coinage was at its zenith and minted abundantly in the time of the Great Mauryas, after which it declined being displaced by the issue of inscribed or 'signed' coins (as Dr. Jayaswal calls them) by the Sunga kings. These identified Mauryan punch-marked coins have been designated as the coins of the later period by me, the term being synonymous

with the Mauryan period.

COINS OF THE MIDDLE PERIOD.

The ancient kingdom of Magadha which was no bigger than the modern districts of Patna, Gaya, Monghyr and Bhagalpur in the time of the Buddhá 1 began to expand into an Empire from the time of Ajātaśatru who came to the throne about eight years before the Nirvana or death of Gautama Buddha, by engulfing the confederacy of Vaisali-modern Tirhut, the kingdom of Kośala, modern Oudh including Kāshi, modern Benares; and in the time of the Nanda Kings some 150 years after, the Empire of Magadha further expanded by adding Avanti, modern Malwa; Panchal 2 modern Farrukhabad, and the Bareilly Divisions; and the kingdom of Sūrasenas of Mathurā. reaching up to the border of the Punjab when Dhana Nanda, the contemporary of Alexander was ruling over Magadha, the then biggest Empire in Northern India in the last quarter of the 4th century B.C. All the said records are counted as the historical facts by Western scholars 3 and also mentioned by the Greek historians.

¹ Cambridge History of India, Vol. I, Chap. VII—The Early History

of the Buddhists by Dr Rhys Davids, pp. 171 to 174.

² Ibid.—Chapter XIII by Prof. Rapson, pp. 305 to 316.

³ Pargiter, Rapson, Vincent Smith and others. A mention of the Great Magadha Empire is made by the Greek historians in the time of Alexander. See Camb. Hist. of India, Vol. I, p. 372.

As it is now fully established without an iota of doubt that the silver punch-marked coins were in currency long before the Alexander's invasion of N.-W. India, we cannot ignore the silver and copper punched coins of the Magadha Kings from the time of Ajātśatru down to the Nandas. It seems an impossibility to think that the Nanda Kings and their predecessors could have managed the vast Empire of Magadha without any silver and copper coinage, if not gold.

What and where are their coins will be the question confronting us. But the answer is very simple and comes from the

punch-marked silver coins themselves.

The coins are generally found mixed abundantly with the Mauryan coins bearing the hill-and-crescent symbol up to the present day from one end of the country to the other, we handle them without knowing, whenever we handle a lot of punch-

marked coins. They are awaiting identification.

Sometimes they are found in hoards without any Mauryan coins. I know of two such hoards consisting of purely pre-Mauryan coins, which I had the opportunity of carefully examining. The one is already published by Sir J. Marshall a hoard of 1,173 coins as the Bhir mound Taxila hoard found with the coins of Alexander and Philip Aredæus his successor, and a Persian coin of the Daraius type in the A.S.I. Report, 1924-25, with illustrations. Another lot was purchased by Mr. Srinath Sah of Benares from Ahraura town of Mirzapur District. Only 150 coins out of 300 or more could be secured, the rest went to the melting pot. All these coins appear to be hoarded before the Mauryans came to power, as not a single coin bearing the hilland-crescent symbol is seen on them, neither on the obverse nor on the reverse side of the coins. Some 50 of these coins are in my cabinet which I have illustrated on Plates IX to XVII, with a mention of their find-place in the 6th column of the plates, in the Numismatic Supplement No. XLV for 1934.

All the coins from the successors of Ajātaśatru¹ the contemporary of Buddha down to the last Nanda king, who was succeeded by the Mauryans, are designated as the punched-coins of the Middle Period in the article, for the sake of differentiation and identification. The identified Mauryan coins help to differentiate them chronologically. All such coins as far as I could collect up to 1932, are illustrated in a tentative chronological order (described hereafter) on Pls. IX to XVII, coins Nos. 1 to 92 in the Numismatic Supplement No. XLV, now awaiting identification of their kings by the scholars and numis-

matists.

Ajatasatru came to the throne about 8 years before the demise of Buddha in about 491 B.C., Cambridge History of India, Vol. I, p. 312, but according to Ceylon Chronology in 552 B.C.

The Mauryas could not have been the only kings who minted the Punch-marked silver coins, as some numismatists have thought it to be the case.1 It appears that these earlier rulers coined abundantly, so much so that even after their downfall, and the change in the system of coinage, they continued in currency up to the 2nd century A.D.

EARLY PUNCH-MARKED COINS.

A brief political and geographical history of Buddha and pre-Buddha period, though scanty would be helpful for the

explanation and identification of Early punched-coins.

It is now historically recognized by the indologists and historians from the study of Early Sanskrit and Buddhistic literature that India before Gautama Buddha was divided into many big monarchies, and small kingdoms, as well as some republics of free clans,2 of which 16 monarchies are specially mentioned in the early texts, they are :-

Anga 3 (modern Bhagalpur and Monghyr Districts).

Magadha (a portion of Southern Behar, Patna and a part of Gava District).

Videha (Janakpur and the vicinity in N. Behar).

Kāśi (Benares District).

Kośala (Oudh).

Vajji (Vaišālī of Lichhavis in N. Tirhut).

Vamsa or Vatsa (Allahabad District on the S. bank of the Jumna river).

Pānchāla (Bareilly and Farrukhábad Divisions).

Kuru (Meerut and Delhi Districts).

Surseni (Mathura District).

Avanti (Málwa).

Gandhara (Peshawar and Frontier Districts).

Kāmboja (Territories to the N.-W. of Indus).

Kalinga (Orissa).

Sauvira (Sophir of Ptolemy, the sea board in Sindh).

Malla, Cheti, Machha and Assaka are also mentioned but their location is not correctly identified.

Out of these kingdoms and monarchies of Northern India, the following kingdoms are specially mentioned of the lifetime of Buddha which had undergone some political and geographical changes :-

3 Ibid., p. 172.

¹ The Mauryan Silver punched coins indicate a highly evolved stage of coinage as compared with the early punched coins.

² Cambridge History of India, Vol. I, p. 175.

Kośala ¹—ineluding Kāśi—(modern Oudh and part of U.P.), in area about the size of France, with its king Pasenadi or

Prasenajit, the contemporary of Buddha.

Magadha—(Patna, Gaya, Bhagalpur and Monghyr Districts), with its old Capital Rājagaha—Rajgir, the ruins of which are considered the oldest identified remains in Behar, with Bimbisar its king also contemporary of Buddha. The kingdom was further expanded into an empire by Ajātaśatru his son, after the lifetime of Buddha, who invaded Kāśī, the Vajjian confederacy of Vaiśāli (N. Tirhut) and the great kingdom of Kośala,² and built a fortress at Pāṭaliputra on the southern bank of the Ganges in about the middle of the 6th century B.C.

Avantī,—including Assaka (Malwa), whose king was Pajjot (Pradyota) also contemporary of Buddha, with his capital Ujjeni.

The kingdom of Surasenas of Madhura (Mathura) with

its king Subāhu another contemporary of Buddha.

Vamsa or Vatsa—(on the Southern bank of Jumna in the Allahabad Division), with its capital Kosāmbi modern Kosam, with its ruler Udena also a contemporary of Buddha, though there is no mention of Pānchāl and Gāndhāra and some Southern Kingdoms of Saurástra and Andhra in the Buddhist books, yet

they all existed undoubtedly in the time of Buddha.

Coins were current in the lifetime of Buddha and even before his birth, which are clearly mentioned with their names in the early Buddhistic literature like Atthakathās already referred to before, and the early Jataka stories which deal with the social and economic life of 7th and 8th centuries B.C. The commentary of Vinaya Pitaka tells us that in the time of Bimbisāra Pádas of 5 Māshakas or 25 Rattis were prevalent, Kārshāpaṇas of Silver and Gold Nishka and Copper Māshakas are also mentioned in the stories of Champeya, Bhūri Dutta, Udaya and Sankhapāla Jātakas, as stated by Dr. Bhandarkar in his Carmichael Lectures, 1921.

Cunningham in his coins of Ancient India has emphatically mentioned in two places ⁵ that Kahāpana (Kārshāpaṇa) was

known in the lifetime of Buddha.

In conclusion it can be safely said that copper and silver punched coins existed in the time of Buddha and were current

in the different independent monarchies of his period.

Again to the questions whether the punched silver and copper coins of the Buddha's lifetime still exist? If available, how could they be identified?

¹ Cambridge History of India, Vol. I, pp. 178 to 188 by Rhys Davids.

Vincent A. Smith's Oxford History of India, p. 46.
 Dr. Bhandarkar's Carmichael Lectures, 1921, p. 111, Calcutta University Press.

⁴ *Ibid.*, pp. 48–50.

⁵ C.C.A.I., pp. 20, 42 and 54.

My humble reply is that they exist, and are available and can be identified to some extent. There are silver and copper punched coins in my own cabinet, and in the cabinets of other numismatists, as well as in the Museums of Lucknow, Patna, Bombay and Taxila, which I have reasons to believe are of early types of the period of Buddha, of the different monarchies which were independent at that time, like the small kingdom of Magadha before it expanded into an empire, Kośala, Pānchāla, the kingdom of Surasenas, Asmaka and Gándhára, which I have already studied—of these only 3 types of the local coins of Magadha, Kośala, Surasenas have been illustrated in my paper published in the Numismatic Supplement No. XLV for 1934, and also in the Journal and Proceedings of Asiatic Society of Bengal, Vol. XXX, 1934, No. 3.

The early local Gandhara (Taxila) punch-marked coins were published partly and illustrated by Sir J. Marshall in the

Archæological Survey of India Report, 1924-25.

The Wai hoard now in the Bombay Museum published by Cordington in the J.B.B.R.A.S., Vol. XII, are probably the early coins of Asmaka.

There are two new hoards of early types now sent to me for classification—one of which I think comes from the site of Ancient Pánchála, a description of which will be published soon.

All such local coins of the lifetime of Buddha and earlier of the then independent monarchies of Kośala, Magadha, Surasenas, Saurástra and Gāndhāra excavated from the localities which lie within the identified area of those ancient kingdoms are classed as the punched coins of the Early Period, and I do not think it an unnecessary repetition to describe them again, with reasons for classifying them as such, into the three chronological divisions, described before.

(1) The punched coins of Buddha and pre-Buddha periods of a different standard weight of 25 Rattis, which are found from particular identified localities of the ancient independent kingdoms, from the middle of the 6th century B.C.¹ and earlier back to the 7th or 8th century B.C., are classed as the Early coins. They generally bear 4 bold and rarely one to two symbols,

of crude, but bold and simple designs.

(2) Punched coins of the post-Buddha period down to the time of last Nanda King, when Magadha became an Empire in Northern India already described before, which are met even now from places situate wide apart in the country, of 32 Ratti standard weight, with 5 symbols, of many similar types in every hoard, are classed as the coins of the Middle Period—of the times covering from the middle of the 6th century B.C. to the last quarter of the 4th century before Christ.

¹ Buddha died in 483 B.c. according to Rhys Davids, but in 544 B.c. according to Ceylon texts, which seems to be authentic.

(3) The punched coins of the Mauryan 1 period most of which have been identified by me are the Imperial coins of Magadha the biggest Empire in ancient Indian History, and of 32 Rattis standard weight; they are found up to the present day in large numbers, generally mixed with the pre-Mauryan coins from one end to the other of the country, even from the border of Sistán, Kabul Valley and Deccan, have been designated as the punched coins of the Later Period, ranging from the last quarter of the 4th century B.C. down to the last quarter of the 2nd century B.C., when the Sunga Kings came to power. It is well known now that after the down-fall of the Mauryas-the system of punched coins was displaced by the signed or inscribed coins. No punch-marked coins of the 1st century B.C. are known to exist, though they were current probably for several centuries, after the Mauryas.

Three very much worn silver punched coins weighing only 35 and 42 grains instead of 57.6 grains the full weight were discovered by Cunningham from the deposit at the foot of Vajrásana (Buddha's throne) in the temple of Mahabodhi of the 2nd century A.D. at Buddhagaya—clearly indicating that the coins represent a degenerated condition of silver currency and were worn nearly

blank by long use.2

Coins of two different hoards illustrated on Pls. I, II, III and VI in the Num. Suppl. No. XLV, each of a peculiar type and particular symbol-groups of 2 different periods found from places situated in the identified area of the then independent Kingdom of Kośala of pre-Buddha or post-Buddha days are now known. No coins of these two types and symbol-groups have been excavated in any other part of the country up to this time like the other common punched coins.

I think it would not be wrong to allot them to the kingdom of Kosala to the period when it was an independent kingdom, before Ajátasatru engulfed it into Magadha in the middle of These coins may be of the lifetime of the 6th century B.C.

Buddha or of the period before his birth.

The said coins in my collection were found on weighing to be about 24 Rattis or 43 grains or a little below, hence I took them to be the coins of 24 Rattis standard weight as mentioned in my previous thesis, but this was not an accurate calculation, some allowance should have been made for their wear and tear They are actually of 25 Rattis standard due to their old age. weight, is further supported by another hoard of over 1,400 coins exactly of the type and symbol-groups as illustrated on Pl. VI of the Num. Suppl. No. XLV, excavated from Kheri District of Oudh, now in the Lucknow Museum, known as Paila hoard.

² For illustration of the coin, see Fig. 15, Pl. I, C.C.A.I., and its description on p. 55.

¹ Chandra Gupta Maurya came to the throne in 321 B.c. Cambridge History of India.

The majority of coins in the lot weigh over 24 Rattis and some are as heavy as 24.7 Rattis, and I now take the opportunity to correct it. They are the Pādas or ‡ of 100 Rattis standard weight coins, which were current in the lifetime of Buddha and even earlier. There is a mention of this 25 Ratti Kahapana, Kārshāpaṇa in the Atṭakathā referred to before; in the Śatpatha Brāhmaṇa coins of 100 Rattis are mentioned which are not known in Kauṭilya's or Manu's works which are of relatively later dates.

I also conclude that in the lifetime of Buddha and earlier, copper and silver coins of 25 Rattis and their multiples, of 50 and 100 Rattis weight or sub multiples, of 25 and 12½ Rattis were current. All such coins are already existing in the Taxila Museum, and there are some in my own cabinet, which I shall publish when describing the copper punch-marked coins in another article.

Another lot of 25 well preserved coins illustrated on Pl. XXXI in the Num. Suppl., No. XLV, which were purchased from Mathura fresh from a hoard, 2 or 3 of them weigh a little over 25 Rattis—which may be due to the selection of a heavier Ratti in that locality. These coins also come under the same category of 25 Rattis weight, bearing 4 bold, crude and simple symbols and are the local coins of the independent kingdom of Surasenas of Chandra Bansi dynasty of the period long before Mahāpadma Nand included it in his Empire of Magadha in about 350 B.C. I am inclined to put the coins two centuries earlier in the lifetime of Buddha, being of the Pāda type.

Another lot of coins illustrated on Pl. VIII of the N.S., No. XLV, which are the half Purāṇas of 16 Rattis come under the category of post-Buddhistic coins. A hoard of 1,251 exactly similar coins was excavated in the Unao District (Oudh) now in the Lucknow Museum, a brief description of which has already been given before, as well as the Golakhpur hoard illustrated on Pls. IV and V of the N.S., No. XLV, which have been published by Mr. Walsh in the J.B. & O.R.S. seem to be the coins of post-Buddhistic period. As stated elsewhere, the Golakhpur coins are a connecting link between the Early and the pre-Mauryan coins. They are the earliest known coins of 32 Rattis weight with 5 symbols, bearing chiefly the figure of the sun 2 and a Chakra. 3

The coins are most probably of the time of Uddai Bhadda son of Ajátasatru of Magadha of the 5th century B.c. as described before.

Other coins obtained from Magadha of a finer execution, and of 32 Rattis standard weight bearing the similar 2 symbols

Not yet published—The coins are illustrated on Pl. VII, of this article, Figs. 1 to 5.

Probably representing Surya Vansi Kings of Magadha.
 The Chakra symbol probably is indicative of Chakravarti Rájá.

of the sun and the Chakra with variations may be taken as the coins of the Surva Vansi Kings and Emperors of Magadha.

And it is not wrong to say that the coins bearing the symbols of the sun and a Chakra along with other three figures are all of Magadha Empire of the post-Buddha period, notwithstanding. that they are found up to this time from one end to the other of

the country.

The above mentioned facts and reasons may not appeal to be fully convincing to scholars not thoroughly acquainted with the silver punch-marked coins of different types, but the theories offer the most befitting explanations of the facts and findings, of the early history and geography of India in the lifetime of Buddha, and the findspots of such crude local coins as well as their weight of a different standard of 25 Rattis, not known to Kautilya or Manu, but mentioned in the early Brahmana and Buddhistic books.

GROUPING OF SYMBOLS ON THE PUNCHED COINS.

As stated before the Early coins of Buddha and pre-Buddha periods of different independent Kingdoms of Northern India are generally punched with four symbols 1 in methodically arranged groups, two of which remain unchanged while the

remaining two are varied, forming sometimes long series.

The most natural explanation of changing of two symbols, with the other two remaining as constant figures on a particular type of coins found from different localities, can be that either a symbol was changed leaving the first three unchanged every time whenever a fresh batch of coins was struck, or the change was made every year to differentiate them from the coins of the previous years in the reign of the same king. The other or the 3rd symbol was probably changed when a new king of the dynasty came to the throne. If this theory be correct then it can be inferred that in a batch of early coins consisting of a series of symbols of a particular group,—the series with the variations of the 4th symbol may belong to one king, and those with a variation of 2 symbols also forming another series may be of another king of the same dynasty; a few examples will not be out of place here.

Take for instance the early coins illustrated on Pls. I, II and III, Num. Suppl., No. XLV, the coins Nos. 2, 3, 4 and 5 seem to be of one king, but Nos. 6, 7, 8, 9 and 10 may be of another king of the same dynasty and the coins Nos. 11 and 12

may be of a 3rd one.

¹ Coins bearing one or two symbols of the early period are also met but are very rare. There are two such coins in my Cabinet from Madhuri, Dist. Arrah.

The same case appears with the early coins illustrated on Pl. VI. Where the coins Nos. 1, 2, and 3 are probably of one king but Nos. 4 and 5 may be of another monarch of the same

dynasty, and so on.

The same condition holds good in explaining the variations of symbols in the series of a particular group-symbols on the coins of the pre-Mauryan and Mauryan monarchs and emperors, which bear groups of 5 symbols where the two symbols remain as constant figures with the variation of the 3rd for the king and the remaining 2 for the change of years and place most probably. For example the post-Mauryan early coins of the Golakhpur hoard of the Magadha Kingdom, illustrated on Pls. IV and V,

Num. Suppl., No. XLV, show the same variations.

It will be noticed that the 1st two symbols remain the same on all the 105 coins but the 3rd changes; in coins Nos. 4 to 63, the 3rd symbol is the same, they seem to belong to one king, the 4th is also the same, only the 5th is varied. Coins Nos. 70 to 89 have another symbol as their 3rd figure in the group, the 4th remains also the same in all the 10 coins with variations of 5th symbol, these coins may be of another king of the same dynasty. Similarly coins 98 to 100 have an elephant as the 3rd symbol in the group, they seem to be of another king of the same dynasty, and so with the coins 101 and 102.

There is no question that all these coins belong to one dynasty having been found in a single hoard from one place, as already described on pages 13 and 14 of the N.S., No. XLV.

Many such instances of the pre-Mauryan coins can be cited, but I would suffice with one more example to avoid lengthening.

The study of symbol-groups illustrated on Plates IX to XVII, up to coin No. 92 would clearly indicate many such instances of variations of symbols in the series of group-symbols.

Group symbols illustrated on Pls. XIII, XIV and XV from coins Nos. 45 to 92 of the N.S., No. XLV, will show the 1st two symbols, the figure of the sun, and the Chakra (formed of 3 Nandipadas in ovals and 3 arrow heads placed symmetrically round a small circle with a dot) remaining as constant figures, but the 3rd symbol has changed probably with the change of the king.

On coins 45 to 47, the 4th figure also remains the same, they seem to be of one king while coins 48 to 49 may belong to another and coins 51 and 52 may be of a third monarch of the same dynasty. But the coins 53 to 65 forming a long series are undoubtedly of another king of the same dynasty who probably reigned for a longer time. The coins of this class 29 are found

¹ Several other coins of class 29 series with different variations of 4th and 5th symbols, not illustrated on the above plates, have been noticed in other hoards after the publication of my article—they all seem to be of the same King.

in majority in every hoard I have come across up to this time, next to Mauryan coins with which they are mixed, and even in the hoard of pre-Mauryan coins they are found in majority-I have noticed this in the Teregna, Purneah and Gorhoghat 1 hoards which contain Mauryan coins, in the Patna Museum; in the Wadia collection of the Bombay Museum, and in the Peshawar hoard described by Dr. Spooner.2

They are also found in majority in the pre-Mauryan hoard

of Bhirmound (Taxila) published by Sir J. Marshall.³

It appears that the said coins of class 29,4 which are found mixed abundantly with the Mauryan coins are the coins of the immediate predecessor of Chandragupta, and it is suspected to be the coins of Mahāpadma Nanda, the son of a Sūdra woman who ruled for 28 or more years and was powerful to expand the Magadha Empire still further by adding Kalinga 5 (Orissa)

and the kingdom of Surasenas 6 (Mathura Dist.).

Though there is no numismatic or archæological proof of its identity yet the probability is in favour of Mahapadma Nanda of the New Nanda Kings. Now coming to the Mauryan coins illustrated on plates XVII to XX, Num. Suppl., No. XLV, from coins Nos. 93 to 131, all bearing the hill-and-crescent symbol, the Rājānka of Chandragupta, which became the dynastic symbol of the Mauryas, as shown before, it will be noticed that the 1st 3 symbols of the groups in the entire series remain as constant figures on all the coins, but the 4th symbols of the groups are varied, forming the series of their own classes.

Coins Nos. 93 to 104 of class 40A may be the coins of a particular Mauryan King. Coins No. 105 to 107 of class 40B, with a peacock may be of another; similarly coins 108 and 109 of class 40C; Coins 110 to 112, of class 40D; coins 113 to 115, and 121 to 124 of class 40E; coins 128 to 130 of class 40J, seem

to be the coins of different Mauryan kings.

In all there have been found up to the time 9 different classes, from 40A to 40J, with variations of the 4th symbol in the groups, one of which the class H was recognized by me to belong to Chandragupta, specially coin No. 128, on account of its find all over India, and its metal ingredients tallying with those described by Kautilya; the other 8 may be the coins of his 8 descendents in the dynasty.

It could not be said in the present circumstances as which

of the remaining 8 classes belong to what king.

² Published by Dr. Spooner in the A.S. of India Report, 1905-6.

Published by Mr. Walsh in the J.B. & O.R.S., Vol. V, 1919, pp. 160-164.

See A.S. of India Report, 1924-25.
 See Pl. XIV, Num. Suppl., No. XLV.

⁵ Cambridge Hist. of India, Vol. I, pp. 313 to 315, by Prof. Rapson. ⁶ The country of Surasenas was usurped by Mahapadma Nanda. Pargiter A.I.H. Traditions, p. 180.

Dr. K. P. Jayaswal has given a genealogical table of the Mauryan dynasty from the Vayu and Brahma Purāṇas 1 which may be enumerated here :-

(1) Chandragupta Maurya-who ruled the Empire of Magadha for 24 years.

(2) Bindusāra his son—who ruled for 25 years.

(3) Aśoka the grandson of Chandragupta—who reigned over a bigger Empire than his grand-father, for 36 years.

(4) Daśaratha the grandson of Aśoka was on throne for 8 years only.

(5) Samprati son of Dasaratha wielded the power for 9 years.

(6) Sāliśuka—ruled for 13 years.

(7) Devadharman—reigned for a short time of 7 years.

(8) Śatadharma was in power for 8 years. (9) Brhadaśva the last, ruled for 7 years.

It may be noted that only 9 Emperors and kings of the Mauryan dynasty are mentioned in the Purānas and recognized by the scholars, the Mauryan coins as illustrated are also of 9 classes, known up to this time as described before.

May it not be that these 9 classes of coins all bearing the hill-and-crescent symbol belong to the very 9 Mauryan monarchs

of which 2 have been identified.

But there may be other coins of different symbol groups belonging to the Mauryas, over and above the coins already illustrated, but they have not been identified as yet.

CONNECTING LINKS BETWEEN TWO SYMBOL GROUPS.

On a careful examination of the illustrated symbol groups in the 3rd columns of the plates, it will be noticed that the change of location of the last symbol in the group changes the group series, and the coin which indicates such a change, stands as the connecting link between the two series of the same class.

Take for instance coins 1, 2 and 3 on Pl. I (N.S., No. XLV) it will be noticed that Nos. 1 and 2 bear the first 3 symbols common to both, marked as class L A; the fourth symbol of the coin No. 2, is a design of 5 crescents with stars in their arms put round a small circle symmetrically, this very figure appears as the 3rd symbol on the coins Nos. 3, 4 and 5, with a hexagram as their 4th symbol in the group, marked as class LB.

Thus it can be said that the coin No. 2, is a connecting link between the classes L A and L B, and indicates the order,

¹ J.B. & O.R.S., Vol. XX, of 1934, p. 279.

viz. that the coins Nos. 3, 4 and 5, should be placed after the coins Nos. 1 and 2, as is done on the plate or vice versa.

This is not without a significance.

The same methodical change of location of the last symbol in a group is also observed in the various series of different classes of coins of the pre-Mauryan and Mauryan periods.

For example on Plate XI, (N.S., No. XLV) coins 22, 23 and 24 belong to the same class marked as 13A, the first 4 symbols in the groups are common on the 3 coins; the 5th symbol on coin No. 24, which is a conventional form of a tree is seen as the 4th figure of the group on coin No. 25, this alteration changes the series, and therefore to differentiate them they are subclassed as 13A and 13B, forming two different series of class 13.

Another example out of the pre-Mauryan coins can be cited. Coins illustrated on Pls. XIV and XV (N.S., No. XLV) from Nos. 53 to 65 of class 29A, bear the 1st 4 symbols common to them all, with various symbols as their 5th in the groups. Coin No. 65 has a caduceus as its 5th symbol, this symbol takes the 4th place in the groups on coins 66 to 68 of class 29B, forming a new series. Thus No. 65 becomes the connecting link between the two series A and B of class 29, as illustrated on the plates.

Other similar examples can be cited from the Mauryan coins:—Coins illustrated on Pls. XVII to XX (N.S., No. XLV) from Nos. 93 to 105 of class 40A, on which the 1st four symbols are common, with various symbols as the 5th figures in the group; but on coin No. 105, the symbol of a peacock perched on a hill, occupies the 5th place, which appears as the 4th figure on coins 106 and 107 of class 40B, thus changing the series, it becomes the link between the two series 40A and 40B, as illustrated on the plate.

Similarly coin No. 121 of class 40E, which has its 5th symbol of a bull appears as the 4th figure on all the coins from Nos. 110 to 112 of class 40D, and thus stands a connecting link between

the groups of two classes.

The coins on the plates in this instance were not properly arranged, the coins of class 40E Nos. 113 to 115 and 121 to 124 in which the coin No. 121 should have been the last, ought to

have been placed prior to coins 110 to 112 of class 40D.

In the same way the coin No. 124 of class 40E having the 5th symbol of a panther following a dog is the connecting link between the series 121 to 124 of class 40E, and coins 125 to 127 of class 40H. Here again the 5th symbol appears as the 4th figure on all the 3 coins from 125 to 127 of class 40H, in the series.

Many other examples can be noticed in the illustrations of groups,—but it must be remembered that the list is not a com-

Other coins of the sub-class 13B were secured which completed the series, after the publication of the article in Num. Suppl., No. XLV.

plete one, many more connecting links will be made out when

other symbol groups are added in their proper places.

All the above mentioned instances indicate a methodical change of the last or the 5th symbol of one group to the fourth place in another group always keeping and indicating the connection of the series of one class with the series of another class.

This observed fact helped me much in the arrangements of the series of the different classes 1 of particular groups of 5 symbols in a partially chronological order. I however wish I could have arranged the symbol-groups and their sub-classes in a strictly chronological order, more carefully, than what has

been done on the plates.

This methodical change in location of the 5th symbol may be due to the changes of kings in the same dynasty, and was the system adopted to preserve the distinctive dynastic symbol-groups on the punch-marked coins of all ages at the same time indicating the particular group-symbols of the particular kings in those early days when writing and dates were not

put on the coins.

It cannot be pretended that the conclusions are final, but they appear to be the most natural deductions from the observed facts. The correctness or incorrectness of these will be proved or disproved by further observations and studies of the silver punch-marked coins of different periods and other new hoards. I have simply attempted to lay out the lines of thought on the observed facts to be tested by other numismatists who have the means of studying the punched coins.

The illustrated plates need revision with some corrections here and there in the arrangement of group figures, in a better chronological order by adding further symbol-groups which are not included in the illustrations, as more coins bearing different groups of the known classes have been seen by me after the publication of the previous thesis, and many more will be added

in future.

PUNCHED COINS OF DIFFERENT STANDARD WEIGHTS.

As described in the previous pages silver punched coins of 2 different standard weights, with their multiples and fractions are now known, and excavated from several ancient sites.

Kautilya in his Arthéastra has described the silver Pana of 32 Rattis weight, its half, a quarter and the eighth. These are commonly found and now identified. Cunningham in his C.A.I.

¹ In the 2nd columns of the plates, the Numerals represent the particular group-classes. The capital letters indicate the sub-classes of the same, and the small numbers added to the letters indicate the numbers of varieties in the series.

has illustrated a half-Pana with the Mauryan Chakra, Pl. I, fig. 17. I have one in my own cabinet,1 but I have not so far seen any quarter-Pana of this period, which may be found one

day.

The 1 Pana is also known, there being 2 or 3 specimens in the Patna Museum, and 2 with Captain Martin, bearing the Mauryan Chakra,2 each weighing somewhat less than 4 Rattis. The smallest coin of the series now known is 18th of a Pana, Sir J. Marshall has illustrated 14 such small coins out of 79 excavated from Taxila in the A.S.I. Report, 1924-25 all weighing below 2 Rattis with the Mauryan Chakra on one side.

Manu has also described the Dharana (a weight for silver) and the Purana (a silver coin) of 32 Rattis; a small silver coin of 2 Krishnalas or Rattis in weight is also mentioned, which he calls: 'Rūpya Māshaka' sixteen of which go to make a Purāņa, the coin of 32 Rattis. The Rūpya Māshaka is so called as it was the Māshaka, made of silver; the usual Māshaka being the small copper coin of 5 Rattis. It is thus clear that Mashakas both of copper and silver were minted and known to Manu. The ratio of silver to copper was evidently 2 to 5 in early days about the 3rd and 2nd century B.C., as appears from Manu's description.4 Calculating on this basis, the silver Karshapana of 32 Rattis would be equivalent to a copper Kārshāpana, weighing 80 Rattis, both the coins are well known.

The absence of a silver Kārshāpana of 80 Rattis was a stumbling block to several scholars before the discovery of the silver Mashakas, when neither the small coin was known, nor was Manu's description of weights and coins clearly understood. His Dharana b was a standard weight for weighing silver, but the word Purana he used for a silver coin of the weight of 32 Rattis. Similarly his Raupya Māshaka was a small silver coin equal in value to the copper Māshaka—a coin of 5 Rattis. The term Kārshāpaṇa when used for a silver coin misled the previous scholars into the belief that it was also one of 80 Rattis, but the total absence of such a coin was a puzzle to them. Doctor D. R. Bhandarkar in his Carmichael lectures felt the same difficulty, as he knew that there existed no silver punched coin of 80 Rattis. It now appears that the silver Purana or Pana was called Kārshāpaṇa, because it had the value of a copper Kārshāpana of 80 Rattis. In our own days we call a 2-anna piece, a

² Fig. 28, Pl. XXVI, Num. Suppl., No. XLV. The coin is illustrated on Pl. 11, Fig. 8, of this article.

¹ The coin is illustrated on Pl. 11, Fig. 6 of this article.

⁴ Manu Sanskrit Text, Ch. VIII. slokas 131 to 137, he mentions Rüpya Mashaka in sloka 135.

Kautilya has also used the term ' Dharana ' in the sense of a weight for weighing diamonds विश्तितव्युक्तम् वज्ञधरणम् Text २ विध . १८ वधा . क्र प्रक.

four-anna or an eight-anna piece of silver, all being based on the value of the copper denominations of the anna or inth part of a rupee; the silver Kārshāpana or Pana of 32 Rattis was

equivalent to a Kārshāpana of 80 Rattis of copper.

It is now well known that the silver punched coins of 32 Rattis were called by different names in different periods. Manu called them Puranas, while Kautilya designated them as Panas. Pana 1 was the name of the copper coin of 80 Rattis weight in the early days, but we know that the silver Pana of Kautilya was also of 32 Rattis 2; here again the ratio of silver to copper was evidently as 2 to 5, as in the time of Manu later. Kautilya called the silver coins of 32 Rattis as 'Panas' because it was equal in value to the copper Pana of 80 Rattis, the common copper currency of early days.

Silver punched coins of 100 Rattis weight, and their fractions, in halves, quarters, eighths and sixteenths have been excavated now. The 33 bent-silver-bars bearing 2 symbols of the Bhir Mound hoard found with the coins of Alexander already described, are the coins of 100 Rattis weight, none weighing below 94 Rattis; their halves of 50 Rattis, quarters of 25 Rattis (the Pádas), eighths of 121 Rattis, and sixteenths of 61 Rattis bearing the same symbol, singly, as are seen on the bent bars (Salākas) have been also excavated from the same Bhir mound one of the earliest site at Taxila, on different dates, which Sir J. Marshall thought to be the early local coins of Taxila. They are now kept in the Archæological Museum at Taxila.

These coins are illustrated on Pl. 11 of this art. Fig. 1 is a bent silver bar of 100 Rattis weight. Its actual weight is 179.4 grains or 99.6 Rattis,3 it is punched at the two ends on one side with a special type of Shadara-Chakra, consisting of 6 Trisulas (tridents) round a small cricle with a dot inside.4

Pl. 11, Fig. 2 of this art. is a half piece and was excavated from 6'-8" below the surface at Bhir mound, Taxila on 7th December, 1920; it weighs 63.6 grs. or 35.3 Rattis; as the coin is much corroded and chipped off it has lost about 14.7 Rattis in weight. The original weight would have been 50 Rattis.

Pl. 11, Fig. 3 of this art. is a quarter piece, excavated from 11'-8" below the surface, it weighs 35.4 grains or 19-6 Rattis, it bears the same symbol and has lost 5.4 Rattis of its original weight, it was excavated on 11th February, 1931.

Pl. 11, Fig. 4 of this art. is a one-eighth piece weighing 19-2 grains or 10-6 Rattis, excavated on 30th November 1920

¹ Vide C.C.A.I., p. 59.

² All the identified silver punched Mauryan coins are of 32 Rattis standard. No silver coin of 80 Rattis has ever come to light.

³ A Ratti is calculated to be 1.8 grains or very near it. 4 Sir J. Marshall has wrongly described this figure to be the crossand-ball symbol.

from 3'-8" below the ground; it has lost 1.9 Rattis in weight,

and bears the same symbol on one side.

Pl. 11, Fig. 5 of this art. is a one-sixteenth piece weighing 7-5 grains or 4-1 Rattis, having lost 2-1 Rattis, it was excavated on 3rd March 1920 from 2'-6" below the level.

More than a dozen stray coins of this series were found, and are now kept in the Archæological Museum at Taxila. No coins like these have ever been excavated from any other part of the

country.

It is evident from these coins that in the kingdom of Gandhara the silver currency of a different standard weight of 100 Rattis with its fractions was prevalent, the coins are of much earlier date and were apparently current there before Alexander came to Taxila in 326 B.C.¹

Silver coins of 25 Rattis weight—the Pādas, have also been discovered from other ancient sites as already described, showing that in the early days before the rise of the Magadha Empire they were current in the independent kingdoms of the time of

Buddha and before him.

Though there is no mention of the coins of 100 or 25 Rattis in Kautilya and Manu, yet we find that coins of such weights were known to the still earlier writers of the Attakathā and Satapatha Brāhmaṇa referred to before, and it may not be wrong to infer that such coins were current in Buddha's days and even before him, i.e. so far back as the 8th century B.C.

THE RAKTIKA OR KRSHŅALA, THE ANCIENT INDIAN STANDARD WEIGHT.

It is an anthropological fact that all measures and weights and even the counting were learnt by man from natural objects

and adapted to suit his purpose.

In India in the very early days, Abrus Picatorius the Kṛshṇala or Raktikā, which has the two names for its beautiful black and red colour, was used as a unit of weight along with the barely corn, paddy and mustard-seed. Its earliest mention

is found in the Taittiriya Brahmana 2 of about 800 B.C.

Different definite weights which were multiples of the Raktikas or Rattis were fixed and adopted with particular names for weighing gold, copper, silver and precious stones; for instance a Māshaka which contained 5 Rattis was used for weighing gold, silver and copper; the Dharana was a weight which contained 16 Māshakas used for weighing silver only; and for copper and gold, the Karsha and Suvarna of 80 Rattis were used. But there was a Dharana of 20 rice weight for

1 Cambridge History of India, Vol. I, pp. 368-374.

² Dr. Bhandarkar, Carmichæl Lecturer, Calcutta University, 1921, p. 60, 'Krishnalam Krishnalam Vajasridbhyah prayachehhati (I, 3, 6. 7).

weighing diamonds as described by Kautilya 1 and Manu. But the question arises as to what was the actual weight of Krshnala

or Raktikā used in the time of Kautilya and before him.

The Krshnala seeds are not of exactly the same size or weight; they vary between 2.25 and 1.7 grains; from a handful of seeds taken at random, the biggest ones weighed on the average a little over 2.25, the medium sized ones worked out at 1.875 grains, while the smaller seeds averaged 1.75 grain each. observations on this point explain the prevalence of different Tola standards of weight still persisting.

The same question was examined by Thomas, Cunningham and other scholars but they arrived at different results. Thomas found a Ratti of old days to be equal to 1.83 grains, but Cunningham came to a figure of 1.8 grains, which I have found also to be the most appropriate mean weight; the heaviest silver punch marked coin in mint-fresh condition which I have come across weighed 57.5 grains, which brings the Ratti to 1.8 grains, as already calculated by Cunningham, and every where in the article I have given the weight of coins in terms of Rattis on the basis of 1.8 grains to a Ratti.

In the early days the silver Panas or Puranas, which were of a Dharana weight of 32 Rattis, weighed 57-6 grains, on account of the selection of seeds of 1.8 grains, which is the weight of the majority of seeds even now. It also appears that at some period and locality the Raktika of a slightly heavier weight was selected; as I found in the case of the silver-punched coins of

the Surasena Kingdom of Mathura, described before.

The same divergence of standard continued in the Muhammadan period and persists to the present day. The Tola as used by the goldsmiths and silversmiths of Benares at the present day contains 96 Rattis, but weighs 216 grains; the here thus 2.25 grains. The Government equals standardized Tolā, the weight of a Rupee of 180 grains is also supposed to contain 96 Rattis, the standard Ratti thus coming to 1.875 grains. The Cawnpore goldsmiths' Tola on the other hand weighs 181.87 grains.

CONCLUSION.

In conclusion it can be said without exaggeration that though the study of silver punched-coins s probably the most difficult branch of Indian Numismatics, yet it is at the same time the most fascinating one.

The science of Numismatics merges here into Archæology and Anthropology. but there is a vast collection of antiquities

¹ विश्वतितण्डलं वच्चधरणम्।

Arthéastra 2 Adhi. 18 Adhyaya, 37 Prakarana. (Manu, VIII, 132-136, Text).

and inscriptions in the various Indian Museums accessible to every scholar, awaiting the careful study of the symbols and figures engraved on them, which are similar to those seen on the punched-coins, and which would in many cases help to check the chronological data of the coins.

The attention of the scholars and Numismatists is drawn towards it, as the researches in this unexplored line are expected to be most useful from the historical point of view by which the real, and the noblest purpose of the Indian Numismatics will be served.

DURGA PRASAD.

Benares. 10th Dec., 1934.

Note: -On page 8 of my article on 'Classification and Significance of the symbols on the silver punch-marked coins of Ancient India' published in the Numismatic Supplement, No. XLV for 1934, and in the Journal and Proceedings of the Asiatic Society of Bengal, Vol. XXX, No. 3, 1934, I have stated, that, out of the 564 symbols illustrated on Plates XXII to XXVII, and Pl. XXXII, only half a dozen symbols are doubtful and a few are incomplete, and wanting.

I take this opportunity now to correct and complete the doubtful symbols, already illustrated there; and add the missing ones, which I have found out from better specimen of coins.

On Plate X of the said previous article, coin No. 19, the 5th symbol in the group, illustrated in the 3rd column, was incompletely drawn,-it should be like Fig. 1 of Pl. 11 of this article.

On the same plate, coin No. 20, the 4th symbol in the group could not be drawn, as it was very doubtful owing to superimposition of symbols. It is like Fig. 2 of Pl. 11 of this article.

On Plate XI, coin No. 23, the 5th symbol of the group is a bare branch of a tree, drawn incompletely; it has a railing below it, like the Fig. 3 of Pl. 11 of this article.

On Plate XII, coin No. 35, the 4th symbol of the group was missing,-it is like the Fig. 4, of Pl. 11 of this article, and should be added there.

On Plate XII, coin No. 37, the 4th symbol in the group which is a tree growing on a hill is not correct, it should be the same tree, but without a hill, like Fig. 5 of Pl. 11 of this article.

Similarly the 5th symbol on coin No. 59, Pl. XIV, should

be without a hill, as stated above.

On Plate XIII, coin No. 52, the 2nd and 3rd symbols were drawn inaccurately, they are like the symbols Figs. 6 and 7 of Pl. 11 of this article respectively. Fig. 6 is a new type of

Published in the Numismatic Supplement No. XLV for 1934 and in the Journal and Proceedings of the Asiatic Society of Bengal, Vol. XXX, No. 3, 1934.

Sadar Chakra, and Fig. 7 is a triscales, with 3 Nandipadas in its

arms, the group should be corrected accordingly.

On Plate XV, coin No. 67, and Plate XXI, coin No. 69/141, the 5th symbols in the groups were not drawn completely; they should be like the Fig. 8 of Pl. 11 of this article.

On the same Plate No. XV, coin Nos. 67, 68, 69 and 69/ 141, the 2nd symbols of the groups should be corrected according to the Fig. 9 of Pl. II of this article, which is a Sadár Chakra

with Damarus in place of Nandipadas in the 2 ovals.

On Plate XVII, coin No. 95, the 5th symbol of the group in the 3rd column, was not correctly drawn, the symbol was disfigured badly owing to the flattening of the symbols, and appeared like a pillar, but it is actually a human figure with a stick in hand, like Fig. 10 of Pl. 11 of this article.

On Pl. XXI, coin No. 143/131, the 5th symbol is missing-it is a bull, like Fig. 11 of Pl. 11 of this article, and

should be added there.

As all these symbols are also illustrated separately on Plates XXVI and XXVII, they should be corrected and added as well on these 2 plates.

Fig. 42a, on Plate XXVI, should be amended.

Fig. 75, Fig. 89, Fig. 112 and Fig. 119 of Pl. XXVII, should also be corrected accordingly and their descriptions changed.

A corrigenda on the next leaf is also printed for the correction of misprints in the previous article published in the Numismatic Supplement No. XLV for 1934, and the Journal and Proceedings of the Asiatic Society of Bengal, Vol. XXX, No. 3,

Corrections should be made there, and I think I owe an apology for my inability to do the correction then, before the

publication of the article.

CORRIGENDA

For the article 'Classification and Significance of the Symbols on the Silver Punch-marked Coins of Ancient India,' published in the Numismatic Supplement No. XLV for 1934, and in the Journ. Proc. Asiat. Soc. Bengal, (N.S.), Vol. XXX, 1934, No. 3.

Please make corrections before reading there.

Page 5 line 21, read a century and a quarter after for a century after.

" 18 line 18, read vide Pl. I for vide Pl. II.

, 21 line 2, add 5th Fig. in the end of the line.

" " line 3, add Ob. 5th Fig. after Pl. IV.

,, ,, line 6, add 5th Fig. after Pl. II.

, 22 line 18, delete and Pl. IV, Re of 43.

", ", line 22, read 12 curved for 16 curved.

" 23 line 20, add 2nd Figs. after 11 and 12. " line 23, read Pls. I to III for Pls. I and II.

, ,, line 38, add and 4 after Coin 1.

,, 24 line 15, add Reverse symbol after No. 98.

,, line 31, add 5th Fig. after coin 19.

,, 26 line 19, add See Pl. IV, Ob. of 57, 4th Fig. after Pl. XLI.

", line 21, read 12 rays for 9 rays and read Fig. 10 for Fig. 11.

" 27 line 30, read Pl. II for Pl. III.

" 29 line 27, read Astára for Ahtara.

33 line 6, read Yoni for Eye.

", ", line 20, read First column for second column.

35 line 12, read 3rd Figs. for 4th Figs. and add Figs. before 98.

" " line 13, add Pl. V after 100.

,, 37 line 30, delete to XV after Pl. IX and read 1 to 8 for 1 to 69.

" line 39, read coin 8 and 8A for coin 10.

,, 38 line 18, read 2 arrowheads for 42 arrow heads.

" line 22, delete See Pl. X.

" " line 23, delete the whole line Ob. of Coin 21, 2nd Fig.

, ,, line 37, delete and XΠ.

,, line 38, delete and 31, after 30.

, 39 line 2, delete and XIII.

22

" line 7, delete Ghata, pitchers or,

47 line 5, read coin 8 for coin 10.

42 line 7, read a M over its back for a M 4 back.

,, 42 line 1, read a M over its back

(91 N.)

Page 50 line 2, read 7 and 10, 5th Figs. for 7 and 8, 4th Figs.

" " line 49, read coin 2, 4th Fig. for coin 2, 3rd Fig.

,, 51 line 20, delete and from the end of the line. ,, line 21, delete Pl. XXI, coin 142.

,, ine 21, detete Pl. AA1, com ..., 53 line 28, read blunt for blund.

,, 56 line 23, read other coins are found for coins there are other coins found.

., line 24, add which after above.

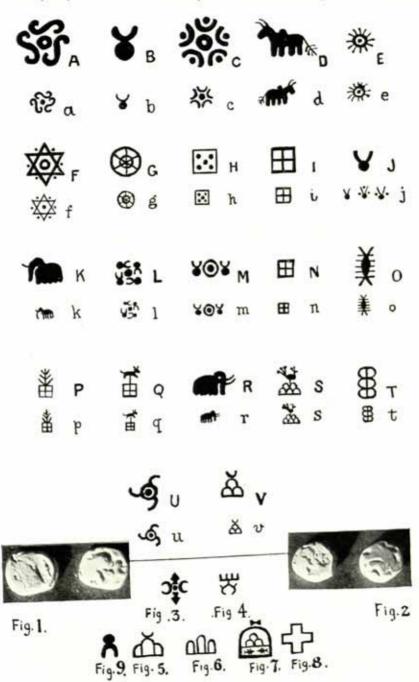
" " line 25, read and in majority are for are in majority.

Plate V, No. 100, in column 2 read 3C1 for 3B2.

Plate X, No. 16, in 6th column add C.C.I.M. after V. Smith and delete C.A.I., Pl. 1-8 of 22nd line.

Plate XXIV—add a note that Figs. 198 to 244 are seen on the Reverse of Sauraseni Coins of Mathura illustrated on Plate XXXI.

Note: —Read Captain Martin for Mr. Martin wherever it occurs in column 6 on the Plates.









F1G. 3.

Fig. 1. Sohgaura Copperplate.



Fig. 2. Base of Kumrahar pillar.



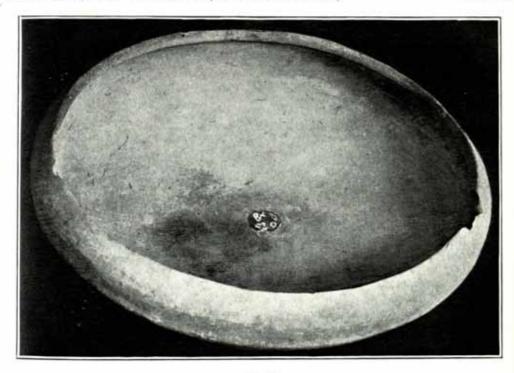


Fig. 1.



Fig. 2.





Fig. 3.





Fig. 4.

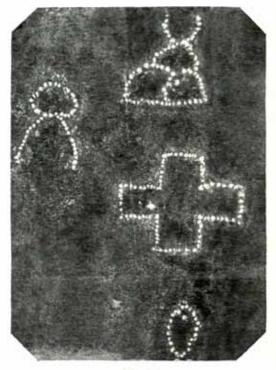
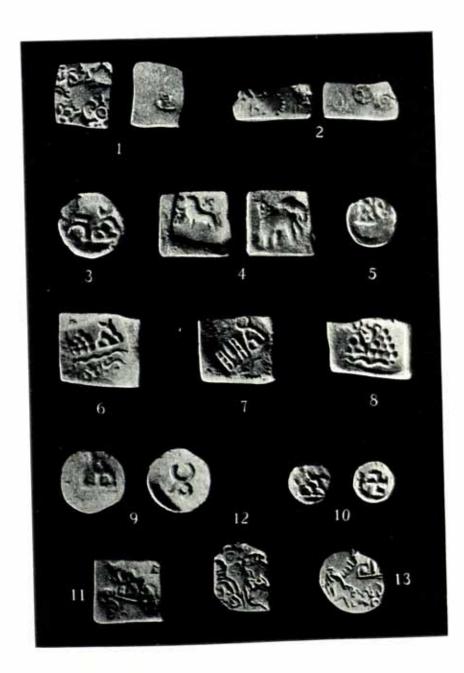
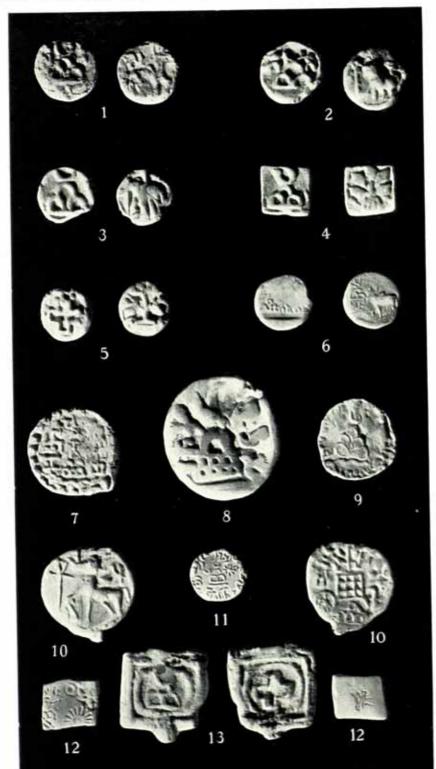


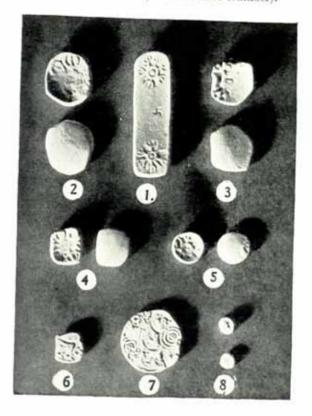
Fig. 5.

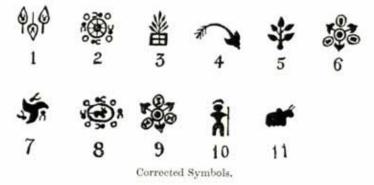














This coin was among the coins collected at Balpur, near Chandrapur in Bilaspur District of the Chhatisgarh Division of the Central Provinces by Pandit Lochan Prasad Pandeya, the enthusiastic Secretary of the Mahakosala Historical Society, to whose energy and keenness the recovery of so much historical material in this remote corner is due. The present coin is said to have been originally discovered in the sand of the Mahanadi river by persons washing the sand for gold. It is a unique coin in several respects and is valuable for the light it throws on the

history and coinage of the Andhra period.

In the Puranic lists of Andhra Kings, there occurs a name which with slight variants may be taken as ¹Apilaka with a reign-period of 12 years. Along with several other names of Andhra Kings, known from the almost unanimous testimony of the Puranas, but not yet been confirmed by archæological evidence (e.g. Lambodara, Nemi Krishna, Pravillasena or Purindrasena) this king has not yet been recognized as historical and but for the present find would have long remained so. The authenticity of the Puranic tradition is thus strikingly confirmed but it is nevertheless true that the actual order in which the kings ruled as given in the Puranas cannot be followed.

In the present instance, the place of Āpīlaka in the Purānas is almost immediately after Šātakarni, and thus comparatively early in the dynastic list. The present coin cannot however be ascribed to an early Āndhra ruler on numismatic grounds and must rather be classed with the eastern issues of later rulers like Śrī-Rudra and Śrī-Yajña Sātakarni and relegated to about the

end of the second century A.D.

The elephant type of the coin of Apilaka is quite distinct from the other types depicting this motif. The early lead, potin and copper coins of Malwa fabric, show the animal either standing or walking left or a small figure standing right. The nearest approximation in style to the present elephant is the figure on the round lead coins of Śrī-Yajña Śātakarni issued in Andhra-deśa, (Rapson's Cat., Pl. VII, 164) but in size, art and execution the present type is by far superior to the other. The other details such as the goad in front and the symbol above are also unique.

The only copper coins of the Andhra dynasty are the rectangular Malwa pieces based on the ancient Karshapanas on

¹ Rapson: Catalogue of Andhra and W. Kshatrapa coins p. lxvi. The Vāyu, p. calls the king Apīlavā, the Matsya Apīlaka and the Vishnu Divīlaka, while the Brahmānda correctly states the name as Āpīlaka.

which the symbols and other motifs are obliquely impressed. In the localities nearest the provenance of the present coin, viz. Chanda on the one hand and the east coast districts on the other, either potin or lead exclusively held the field. It is therefore likely that Apilaka must have followed some local prototype, in issuing his copper coins, although very few copper coins with a blank reverse have been so far found. The weight of the coin (65 grains) suggests a comparison only with Kushan copper coins, which at one time circulated throughout North India.

The legend in which the epithets raño and Sivasirisa appear before the king's name does not exactly correspond with that on any other Andhra coin. The legend found on certain lead coins of Andhra-desa (Rapson's Cat. page 29) reads raño vāsithi putasa Sivasiri-Sātakamnisa, which indicates a ruler by the name Sivasiri-Sātakamni, with the metronymic Vāsishthīputra. Apilaka does not use any metronymic, but on the other hand the use of the genetive after Sivasiri on his coins shows that this was regarded as an epithet rather than part of his regular name, as in the case of Vasisthiputra. The use of these epithets or birudas with śrī at the end seem to have been almost regular with the Andhra kings and queens, such as Sakti-śrī, Veda-śrī, Bala-śri, Yajña-śri and the alternate form Śri-Yajña in which the last name occurs renders it probable that such names as Śrī-Krishna, Śrī-Chandra and Śrī-Rudra may also have alternatives as Krishna-śri, Chandra-śri and Rudra-śri. This may also explain why the king who calls himself siri-chada-sāti (Srichandra-sāti) is known as Chandra-śrī Śātakarni to the Purānas.

The conclusion is thus irresistible that Sivaśri Apilaka was a scion of the Andhra family, but had an independent principality at the north-easternmost limit of the Andhra Empire over which he ruled sometime at the end of the second or beginning of the third century A.D.

Obverse: Elephant standing right,

In front, elephant-goad, above Legend around the edge of the coin, commen-

cing IX, rāno Sivasiris = Ā pīlakasa.

Reverse: Blank.

Æ, size 1", weight 65 grains.

K. N. Dikshit.

345. Two notes, on Western Kshatrapa Coins, and on Valabhi Coins.

A. THREE HOARDS OF THE COINS OF THE WESTERN KSHATRAPAS.

It is well known that the chronology of the Western Kshatrapas is fixed mainly on the strength of the comparatively large number of their coins, many of which bear dates while their inscriptions are indeed very rare. It becomes therefore necessary to study each new hoard in great detail and see if there is any possibility of fresh light being obtained on this otherwise dark period of Early Indian History.

Details about the coins of all the three new hoards have been collected and tabulated at the end of this paper for facility of reference. In the body of this paper I only wish to bring out the novel and interesting points about the coins in each of

these hoards.

I. Sonpur (Chhindwara) Hoard of 633 Coins.

A big hoard of 670 silver Kshatrapa coins was found in 1925 by Surat Ahir and others at Mauza Sonpur in the tahsil and district of Chhindwara in Central Provinces. Out of these 37 coins were melted away by the finder for making ornaments and the remaining 633 were sent to me for detailed examination by my friend Mr.M.A. Suboor, coin expert of the Central Museum, Nagpur. On the strength of my recommendation the coins were distributed in 1927 to several museums in accordance with the procedure laid down for the distribution of Treasure Trove Coins.

Since the Western Kshatrapas are not known to have had any control at any time over Central Provinces, these coins could not ordinarily have been current in the district and the natural inference would be that some one must have acquired them from the Kshatrapa dominions and buried the treasure with the idea of removing it at a future date. The popularity of Kshatrapa coinage is testified by its find at several places far beyond their territory.

The treasure is thoroughly representative and contains coins of all kings from Rudrasena I (121s') to Swami Rudrasena III (300s') with the exception of Sanghadaman. More than half the number of coins belong to Visyasena (150), Rudrasena II (114) and Bhartridaman (110). Out of the whole lot only

200 coins are without date while the rest bear dates.

This hoard gives us several variants of the symbols or forms used for giving dates as also several new dates which are detailed below.

Coin No. 26.

- (1) The horizontal stroke which cuts the (\(\formall \) like) form used for four is considerably curved down at both ends \(\formall \).

 Coin No. 35.
- (2) Sign for 60 has the horizontal stroke at right angles to the vertical body more towards the upper end and not towards the lower end as is usually the case Coin No. 507.
- (3) In the coin of Rudrasimha II dated 227 the sign of 20 is just like an ellipse without any horizontal stroke or dot in the middle. O.

Coin No. 57.

(4) In this coin there is double 'ya' in the name of Vijaya' sena.

The following new dates are known for the first time from this hoard :—

Dāmasena M.K			1 (4) 7
Viradaman, K			157
Rudrasena II M.K.	* *		195
m " 2 ·	* *	**	199
Bhartridaman M.K.			216
Swami Rudrasena III			284
39.			28 (5)
22		4.4	287
.27	4.5		301
**		0.000	(3) 12
			31X

Usually on the reverse of these coins we find in the central portion the Sun, the Moon and the Chaitya or the Hill mark. I

consider that the so-called Chaitya symbol represent the hill or the earth for the following reason. In stone or copper inscriptions recording grants, it is generally recorded by the donor that his gift may be as permanent as or may last as long as the Moon, the Sun, the Ocean, the Earth and the River would last (Ā chandrārkkārnnava-Kshiti-Sarit-Samakālinam). Almost

all these signs, viz. the Crescent representing the Moon, the cluster of small sphere surrounded by eight rays on all sides in the earlier coins and the cluster of eight dots in the later coins representing the Sun, the Chaitya representing the earth or the mountain and the wavy line below that symbol representing the river are impressed also on these coins with a view to give them the same permanency.

In some of the coins of this hoard, we observe some new

signs which may be described as under :-

Crescent (a) one crescent, (b) two crescents one over the other, (c) crescent in a circle.

Cross (a) Cross in a circle, and (b) cross in a square.

Square (a) cluster of three squares, or (b) four squares.

Circle with a thick bar bisecting it diameter-wise.

Cylinder with the vertical lines bending inwards towards the middle making it look like a Damaru.

It is not possible to surmise anything about these signs without comparing them with fresh signs which may be detailed in other Kshatrapa coins.

II. The Junagad Hoard of 520 Coins.

The second hoard of 520 coins has been lying for some time in the Junagad State treasury but unfortunately there is no

record about its provenance and date of discovery.

This and the following hoards were originally examined by Mr. A. S. Gadre, the Curator of the Watson Museum of Antiquities at Rajkot, but were kindly sent to me by the Diwan Saheb of Junagad for re-examination at my request. Later on two more lots of 209 and 77 Kshatrapa Coins lying in the Bahadurkhanji Museum at Junagad were sent to me to facilitate the selection of coins for the said Museum from both these hoards at the time of distribution. In the first lot of 209 coins there were 134 coins of Swami Rudrasena III and with the following new dates:

Swami, Rudrasena III. Dates 2828', 287, 288, 290, 291,

296, 29(7).

The present hoard of 520 coins has as many as 286 coins of Bhartridāman and as there are no coins of any subsequent ruler it may be inferred that the hoard must have been buried during the time of that ruler, i.e. towards the end of the third century A.D. The following new dates are obtained, of which the last is important:—

Rudrasimha I. 117. Rudrasena II. 19(6) or (7), (19)7. Viśvasimha M.K. 211. Coins of Bhartridaman as M.K. dated 211 are known but with the help of this coin of Visvasimha as M.K. dated 211 it can be asserted that Bhartridaman must have become Maha Kshatrapa during the year 211 in succession to Visvasimha who held that designation in the earlier part of the year.

III. Hoard of 591 Coins from Vasoj.

This hoard was recently found at village Vasoj in the Unā mahal of Junagad State not far distant from Diu. It is quite representative and includes coins of most rulers from Rudrasimha I down to Swāmi Rudrasena III. Coins of early rulers up to Dāmajadaśrī III are very few in number, while of the next four rulers there are as many as 163. Lastly Rudrasena III alone is represented by 370 coins.

The new dates supplied by this hoard are detailed below. Besides these there are several dates which are known from this as well as in other hoards described above but those have been omitted. There are two coins of Bhartridāman dated 215 and 216 but a coin with the former date was noticed in the Sarvāṇia hoard and the latter date is known from a coin in the Sonpur hoard described above.

Rudrasimha I	 119	(Last known year
		of the ruler.
		Succeeded by
		Jivadāman dur-
		ing the same
20 12 150		year).
Rudrasena I	 127	
17- 1-	1000	

 Rudrasena I
 ...
 ...
 ...
 127

 Vîradāman
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 ...
 16(1)

 Viśvasena
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About the coin of Viradāman with date 16(1) Rapson also suspected the unit figure to be 1 in the coins Nos. 455 and 457 of his Catalogue of British Museum Coins. Coins of Rudrasena III, dated 287 and 288, are not noticed anywhere but are described above as existing in the Junagad Museum collection.

The coins in the last two hoards are being distributed by the Diwan Saheb, Junagad State, to various museums in accordance with the Treasure Trove Distribution list for British India.

Names of Princes.	Sonpur (C.P.) Hoard.		Junagad 1st lot of 520.		Vasoj Hoard.	
	Dated.	Un- dated.	Dated.	Un- dated.	Dated.	Un- dated
Rudradāman	4.4	**		3		
Dămajadaśri I	11		124	1		
Jivadaman	6.0	9.60	24.4	4.40		144
Rudrasimha I		200	3	2	1	
Satyadāman	5.5		**	4.40	+ +	18.5
Rudrasena I	1		5	3	2	
Prithivisena					4.4	
Sanghadāman	4.9		+ +	4.4	9.47	
Dåmasena	4	4	1	2	1	1
Dămajadaśri II	1 2 9	***	200	24040		9
Ishvaradatta	2		**	++	**	
Viradāman		4	6	3	3	- 1
Yasodaman I	2		1	1	4.4.	
Vijayasena	54	9	24	10	6	2
Dāmājadašīri	1931	100			193	
III	10	4	6	3	1	1
Rudrasena II	80	35	46	40	11	26
Visvasimha	9	20	12	44	1	12
Bhartridaman	61	49	44	242	7	62
Visvasena	88	62			12	32
Rudrasimha II	24	16		122	2 7	8
Yaśodāman II	24	8	(4.4)	0.00	7	11
Swāmi Rudra-					Tours.	
sena III	3	557	25.5	55.5	162	208
Jnassignable	1	49	0.0	18		9
TOTAL	373	260	148	372	216	375

B. LEGEND ON VALABHI COINS.

Several attempts have been made till now by various scholars to correctly read and translate the legend on the coins known as Valabhi Coins.1 The final word has not yet been said on the subject. Rev. Father H. Heras, S.J., of St. Xavier's College sent me a large collection of about 200 of these coins for examination. All these are well preserved and bear the identical legend in the same style of writing. This prompted

A.D. 1835, J.B.A.S., Vol. IV, p. 687, J. Princeps.
 A.D. 1850, J.R.A.S., Vol. XII, p. 64, E. Thomas.
 A.D. 1855, J.B.A.S., Vol. XXIV, E. Thomas.
 A.D. 1861, J.B.B.R.A.S., Vol. VI p. XXXIX, Shastri Vinayak.
 A.D. 1862, J.B.B.R.A.S., Vol. VII, p. 14, Newton.
 A.D. 1879, Report of the Archaeological Survey of India, Vol. IX,

p. 28, Cunningham.
A.D. 1893, Coins of Medieval India, Pl. I, 17, Cunningham.

me to make one more attempt to offer a plausible reading of the legend on these coins, as well as a few remarks by way of interpreting the legend on a systematic and palæographic basis. I also examined a few more coins from the cabinet of the Prince of Wales Museum and noticed that there were two distinct types of these coins. The coins of the first variety resemble the Kshatrapa coins, as regard the shape and size as also the form of the letters inscribed on them. The major portion of the legend is still undecipherable, but it undoubtedly begin with the letters 'Rajño mahā-Kshatrapa' which are found only on Western Kshatrapa coins. The coins of the other type are more like the dumpy and irregularly shaped coins of the later Gupta period. It appears, therefore, that the Valabhi coins were first minted as a local issue in the time of the later Kshatrapas (about the end of the 4th century A.D.) and were current till the middle of the 5th century A.D., when the rulers of the Valabhi dynasty appropriated them as their own currency with necessary modification in the legend, shape and size. The first and the earlier type of coin is .6" in diameter and weighs 27 grains, while that of the later type is .45" in diameter and weighs 29 grains. Besides in the former the lower part of the trident is like a simple perpendicular rod while in the latter there is something like an axe at right angles to it.1 In both the types there is the head of the king to right on the obverse and on the reverse the trident surrounded by the legend which begins from the figure I of the clock.

The letters are evenly distributed and there is no vacant space anywhere. Some coins bear the complete legend but the top and bottom strokes are not complete. For this reason I selected different lots of coins, for different parts of the legend on those coins. I give below a copy of the legend as reconstructed from several such coins. Legend on the first variety:—

78x14201717617171717171717

Legend on the second variety :-

7年131月:51日1×15年11日11日1日21日21

¹ This can be construed as an attempt to please the Vaishnavites by adding the representation of paras'u (axe) the weapon of Paras'urama, one of the incarnations of Vishnu, to the Trident, the symbol of Siva-(I do not consider this as a plausible explanation—Ed.)

Interpretation or decipherment :-

Cunningham in his article on these coins in Archæological





Survey Reports, Vol. IX, p. 28, has given two different readings as follow :-

- (1) Maha Rajno maha Kshatrapa parama samanta maha sri Bhattarakasa.
- (2) Rajno maha Kshatrapa paramaditya Rajno samanta maha sri Bhattarakasa.

Both these readings end with the words 'Bhattarakasa'. Similarly in the legend as copied by me from the present lot of coins the last four letters can be read as 'ttarakasa' which is the final portion of the name of senapati Bhattaraka, the founder of the Valabhi dynasty as is ascertained from the numerous Valabhi copper plates known to us. After correctly interpreting this part of the legend, I proceed to decipher the remaining part not on conjectural or plausible grounds but on purely palæographic basis.

The 1st, 4th, 13th, 15th and 18th are exactly like the regular Brahmi 'ra' of the period and similar to the 20th letter which is 'ra' of Bhattarakasa. These all, therefore, have to be read as 'ra'.

Similarly the 3rd, 8th, 11th and 14th letters are very much alike the last letter 22nd which has been read as 'sa'. These letters are like 'Pra' of the Brahmi alphabets. But the Brahmi 'sa' in Gupta coins can easily assume this form by the shifting of the lower stroke little to the right.

The remaining letters are now discussed individually in the regular order. The 2nd letter has been read till now as jño firstly because in the first type the letter is clearly inscribed as such and secondly because the 5th and 6th letters which are

very similar to those on the Kshatrapa coins can be read as 'Ksha' and 'tra'. For that very reason the 3rd and 4th letters have been read as 'ma' and 'hā' which would give the complete phrase Rājno mahā-Kshatrapa. The upper portion however of the 2nd letter is like the upper portion of 'sa' in the legend and the lower part is also similar to 'ta' in Bhattarakasa. The stroke of 'ra' is also found at the lower end of 'ta' and hence I would read the letter as 'stra' probably written incorrectly for 'shtra'. The 1st and 2nd letters will thus give the word räshtra—meaning Kingdom.

The 5th and 6th letters have to be read as 'Ksha' and

'tra' though in 'tra' the upper curved stroke is missing.

The 7th fetter can be compared with the letters 'para' as part of the legend 'Parama Bhagavata' found on Gupta coins. There in the letters 'pa' and 'ra' written very near each other seem almost of the shape of three vertical parallel strokes with one horizontal stroke below. Both these letters seem to have been taken as 'Pa' only and the whole sign has been put here as representing 'pa'.

The 9th letter is also similar to the 7th with the exception

of the horizontal stroke at the bottom.

The 10th letter is clearly 'Ku' as can be seen by comparing it with the same letter in the coins of Kumaragupta. The sign of 'U' appears like a comma which is the regular sign of the later period in several coins of Kumaragupta but in some of them we find it exactly as it is given here. This second form resembles more the sign of long 'U' of the later period.

The 12th letter is clearly the 'ma' of the Gupta period though because of the absence of the horizontal stroke at the bottom it

resembles more the 'ma' of the Kshatrapa period.

The 16th letter can be read as 'srih'. It has some resemblance also with 'tra' but clear vertical stroke at the top of the curvature and two dots one over the other after the letter to serve as Visarga leaves no doubt as to the correct reading of the letter. It compares very favourably with 'Srih' of the Gupta coins though the horizontal stroke inside the curvature is here

missing.

The 17th, i.e. the last individual letter to be assigned is the most important but at the same time most difficult to be read. It just precedes the letters 'ttarakasa' and one is tempted with all possible stretch of imagination to read it as 'Bha' to get the name of the real historical and fitting founder of this dynasty namely Bhattaraka. Here however is an attempt pledged to be based solely on palæographic grounds and one has to make the most of the similarity which can be traced with some of the known letters of that period. 'Bha' of the Asokan, Kshatrapa and Gupta period has nothing in common with this letter and has to be left completely out of consideration. The letter has the greatest resemblance with either 'Pta' of Gupta or 'Pra'

of Prakashaditya. 'Pu' of Puragupta is quite vertical, has no turn to the left and hence cannot claim any consideration. I would prefer to read it as 'Pra' as in 'Pta' the curvature is with its ends downwards. The legend, therefore, as construed reads 'Rashtra sara Kshatrapasa Ku samara sara shrih Prarattarakasa'.

This attempt at interpreting the legend as copied from the coins of the later type does not lead us any way nearer to the

solution of this problem.

My friend Pandit Ratilal M. Antāni of Udaipur sent me some silver coins of this type two of which are illustrated here. One of these seems to be of the earliest period and offers a clue

to correct reading of the legend.

As Valabhi coins were minted with the designs obtainable in later Kshatrapa and Gupta coins, clue for deciphering the legend on them, should also be obtained from these as well as other contemporary coins known to have existed in the province. The legend on Kshatrapa coins is from beginning to the end of a uniform type beginning with the title Rājno Mahākshatrapa and ending with the names of the father and the son. In silver and copper coins of the Gupta princes the name of the king is preceded by the epithet Parama Bhāgavata Mahārājādhirājaśri. On the coins of the Rāshtrakuta King Krishnarāja the legend gives Parama Māheshwara Mātā pitro pādānudhyāta as the epithet of Krishnarāja.

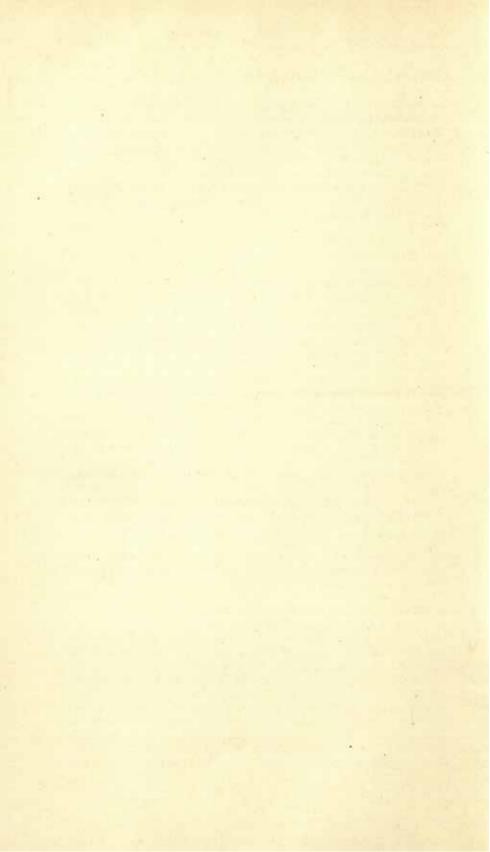
Now on the coin above referred to the legend begins at XI and can be positively read as follows Rājno Mahākshatrapa... [Dhara]-nu Dhyāta[ku] samara saha Śri Śarvva Bhattārakasa

(sya).

The legend can be translated thus :-

This is coin of the illustrious Śaiva Bhattāraka who meditated on the feet of King Mahākshatrapa and who was his associate in the battlefield.

G. V. ACHARYA.



One of the most interesting type of coins issued in the Gupta period is undoubtedly the one, which has on the obverse the figures and names of Chandragupta and Kumāradevī and on the reverse a goddess seated on a lion along with the legend Lichchhavayaḥ. Early numismatists attributed these coins to Chandragupta I, who was assumed to have issued them jointly with the Lichchhavis and their princess Kumāradevī, who was his consort. Mr. Allan has, however, dissented from this view in his Catalogue 2 and maintained that they were issued by Samudragupta in commemoration of his father and his own Lichchhavi descent. In this paper it is proposed to examine how far this view is correct.

Mr. Allan maintains that the type of Kushāna coins, which the Guptas obviously copied, did not circulate in the Gupta kingdom over which Chandragupta was ruling, and therefore we must place the origin of the Gupta coinage in a period when the Guptas had come into closer contact with the late Great Kushānas whose eastern (Panjab) coinage they copy; what historical knowledge we possess points to this period being, not in the reign of Chandragupta I, but in that of Samudragupta to whom the Shāhis, Shāhānushāhis and Śakas surrendered the enjoyment of their territories and the numismatic evidence

quite supports this '.3

To judge from the analogy offered by the so-called Puri Kushan coins, this argument is not convincing. A large number of copper coins in Orissa belonging to the 6th or 7th century A.D. have been discovered closely imitating the common Kushāna copper type, obv. king standing, and rev. some deity. At first these coins were found only in Puri and Ganjam districts and were therefore taken to have been brought with them by pilgrims. Recently, however, these coins have been found practically throughout Orissa and Chhota Nagpur, viz. in the districts of Ranchi, Singhbhum, and Balasore and in Mayurbhanj State. On some of the coins found in the Ranchi and Singhbhum districts, the legend tanka is written in the 7th century characters. Rapson's view that these coins were like Rāmaṭankas intended to be mere temple offerings and that they belonged to the latter

¹ Smith, Early History of India, 4th Edition, p. 296.

² Catalogue of Indian Coins, Gupta dynasties, pp. lxiv-lxviii.

³ Ibid., p. lxvi.

Rapson, Indian coins, p. 13.
 J.B.O.R.S., 1919, p. 73.

⁶ A.S.R., 1924-5, p. 38.

part of the Kushāna period 1 can no longer be supported. These coins were clearly the main currency throughout Orissa down to the 7th century A.D. We thus find that a coin type, closely imitating the Mihir type of Kanishka in copper, was being issued several centuries after the disappearance of the Kushana power and in a province where Kushana coins are not known to have circulated. If the Kushana coinage was introduced in Orissa by pilgrims and merchants, it is clear that it soon became popular and the local governments and moneyers selected it as a model for their coinage, which was continued up to the 7th century A.D. We need not, therefore, necessarily place the beginnings of the Gupta coinage in the reign of Samudragupta, when the Gupta empire touched or partially included the territories in which the Kushana coinage was then circulating. Before the Gupta period there does not seem to have been any regular gold coinage in Madhyadeśa. Traders and pilgrims from the Punjāb and Mathura visiting Benares, Allahabad, Gayā and Pātalīputra must have been bringing with them a number of the contemporary Kushāna gold coins for facilitating their transactions. Chandragupta I could therefore very well have selected this as the prototype of his own coinage, even when his dominions did not extend much beyond Allahabad.

The main reason why Mr. Allan regards these coins as medallic pieces issued by Samudragupta is their originality in type as compared with the slavish imitation of the Kushana prototype as seen in the Standard type of Samudragupta. How are we to account for his (Samudragupta's) return to a relatively slavish imitation of Kushana types after the comparative originality of his father's coins?' asks Mr. Allan.2 The question is not difficult to answer. Mr. Allan has himself observed that the Chandragupta-Kumaradevi type of coins is only one step further removed from its prototype than the Standard type of Samudragupta, viz., by the addition of the figure of the Queen on the obverse and the substitution of the lion for the throne on the reverse.3 This relative originality was, however, due not so much to the ingenuity or originality of the mint-masters as to the necessities of the political situation. It is admitted on all hands that the rise of the Gupta empire was to a great extent due to the matrimonial alliance of Chandragupta with the Liehehhavi princess Kumāradevī and the great accession of power and prestige which it brought to the Guptas. Samudragupta proudly mentions his descent from the Lichchhavi princess Kumāradevi, and his selection to the throne by his father was probably to a great extent due to his Lichchhavi descent. Some scholars have even gone to the

3 Ibid., p. lv.

Rapson, Indian coins, pp. 13-14.
 Catalogue, pp. lv-lvi.

extent of suggesting that the Lichchhavis themselves were ruling over Pāṭalīputra down to the beginning of the 4th century A.D., and that Chandragupta succeeded to the power previously held by his wife's relatives by means of his matrimonial alliance.1 Whether such was the case or not, it is clear that Kumāradevi was a queen by her own right, and the proud Lichchhavis, to whose stock she belonged, must have been anxious to retain their individuality in the new imperial state. To take an analogy from English history, a section of the English Parliament was anxious that even if William III were given for the sake of administrative convenience the full powers of government, Mary should have the status not of the Queen consort but of the Queen reigning by her own right, and that her portrait should appear by her husband's side on the coinage. Similarly the Lichchhavis may have insisted that their own name and the figure of their princess. Queen Kumaradevi, should appear on the new imperial coinage, which Chandragupta thought of issuing on assuming the imperial title Mahārājādhirāja.2 This peculiar political situation must indeed have been responsible for the addition of such features as the name and figure of Kumāradevī occurring on the obverse. Mr. Allan is surprised that Chandragupta should have been content to issue only a joint coinage throughout his comparatively long reign. The reason is obvious. He must have thought it diplomatically expedient not to offend the susceptibilities of the Lichchhavis by discontinuing the joint type. To revert to the English example, it may be noted that William III continued the joint type of coinage till the death of Queen Mary II in 1694, after which he issued for the first time coinage in his own name bearing only his own portrait. As coins of Chandragupta I bearing only his own name and figure are not found, we may perhaps conclude that Kumāradevī did not predecease her husband. It may be pointed out that Mr. Allan's view that Chandragupta I had a comparatively long reign does not appear to be justified, if he is referring to Chandragupta's reign as an emperor. Chandragupta must have thought of issuing coinage only in the latter part of his reign, when his position had become sufficiently strong and secure to justify his assuming the imperial title and starting a new era. Within less than 9 years after the last mentioned event, Samudragupta was already on the throne as is

Smith, Early History of India, 4th edition, pp. 295-6.

² Mr. Allan observes that we need not necessarily assume that Chandragupta I struck coins on assuming the title Mahārājādhirāja, as some of the greatest Hindu sovereigns, e.g. Harshavardhana, do not appear to have struck coins at all (p. kviii). It may be pointed out that we have now found several coins of Harsha; the coins of Śilāditya published by Sir R. Burn are undoubtedly to be attributed to that emperor as maintained by him. (J.R.A.S., 1906, pp. 843-850.)

proved by his Gaya copper plate. It is therefore by no means certain that Chandragupta really ruled long after he had started

an era and begun his coinage.

The original feature of the reverse of these coins consists merely in the substitution of a lion for the throne of the goddess. It may be pointed out here that goddess seated on the lion is not unknown to the Kushāna coinage. Nana appears as seated on a lion as early as the reign of Huvishka.2 Recently Captain Martin has published a coin of the Late Kushāna King Kaneshko, where a goddess, whose name is unfortunately illegible, is shown as seated on a lion in the same way in which she does on the Chandragupta-Kumāradevī coins.3 The mint-masters of Chandragupta may well have taken the idea of representing the goddess as seated on the lion from this Kaneshko type.4 They may have modified the prevailing throne type by the substitution of the lion, as was the case with this recently published Kaneshko type, probably because Durga, seated on her mount the lion, was the tutelary goddess of the Lichchhavis, whose name appears by her side. The presence of this legend Lichchhavayah can also be satisfactorily explained by the joint coinage theory. The Lichchhavis claimed to be equal partners with the Guptas in the new empire and so it was necessary to put their name on the reverse. This system of putting the name of an honoured ally on the reverse seems to have been suggested by the earlier practice of putting the name of the heir-apparent, vicerov or governor on the reverse, as seen in the case of the coins of Azes I, Azilises, Vonones, Gondopharnes, Hermæus, etc.

With reference to the reverse of these coins Mr. Allan observes that 'It is impossible that if the coin engravers had succeeded in evolving a type like the reverse of Pl. III, 14 or 15 (where the incongruous back of the throne is altogether eliminated), they would have reverted in Samudragupta's reign to reverses like Pl. I, 1-4,—Pl. IV, 1 etc. and begun the process of freeing the type from meaningless elements anew'. If this argument were faultless, we should expect that the mint masters having once succeeded in freeing the reverse from meaningless elements in Samudragupta's reign, the reverses like those on Pl. I, 1-4 should not reappear in later reigns. As it is we find that

¹ Even if we assume that this plate is spurious, it is clear that the forgery was committed not later than the 6th century A.D. The knowledge about the duration of the reign of Chandragupta I must have been fairly accurate at that time, and the forger is not likely to have committed any mistake in the dating of the plate.

² Catalogue of the Coins in the Punjab Museum, Vol. I, Pl. XX, x.
³ Numismatic Supplement for 1931-3, p. 7.

⁴ It is true that this type is at present rare, but we find cases of rare types being sometimes selected as prototypes. The copper coinage of Bhūmaka has for its prototype an obscure coin type issued jointly by Spalirises with Azes; see Rapson, Catalogue of Andhra Coins, p. cvii and Pl. IX, 237-242, and Punjab Museum Catalogue, Pl. XIV, No. 396.

Chandragupta II, the successor of Samudragupta, has also issued coins exactly similar in their reverse to the coins on Pl. I, 1-4 as will be clear from Mr. Allan's catalogue, Pl. VI, Nos. 1, 3 and 4. It is obvious that in spite of the originality exhibited by the mint-masters on some types, they did revert again to the Kushāna prototype as late as the reign of Chandragupta II. This may be due to local reasons, such as the partiality felt for the type in some areas, mostly in the northern parts of the Gupta empire.

We shall now consider the rest of Mr. Allan's arguments against assigning these coins to Chandragupta I. Chandragupta I had issued coins, it would be remarkable ' says Mr. Allan, 'that Samudragupta did not immediately continue their issue'. There is however no evidence to show that there was really a large interval between the coinage of Chandragupta I

and that of Samudragupta. The legend-

Samara-śata-vitata-vijayo jita-ripur=ajito divam jayati on the Standard type of Samudragupta's coins need not prove that they were issued towards the end of his reign after his northern and southern victories. Samudragupta was the right hand of his father and had distinguished himself on many a battle-field during the latter's lifetime; his selection as the Yuvarāja was largely due to his proved mettle. The legend samarasata, etc. can very well refer to his victories won as Yuvaraja. It may be further pointed out that this legend on the Standard type of Samudragupta's coinage is the least bombastic and grandiloquent of his legends. The legends on his Battleaxe, Archer and Asvamedha types:

Kritānta-paraśur=jayaty=ajita-rāja-jetā=jitah (Battle-

axe type) vijitya kshitim sucharitair ≠divam jayati Apratiratho (Archer type)

Rājādhirājah prithivim vijitya

divam jayaty=ahrita-vājimedhah (Aśvamedha type)

undoubtedly put forward a greater claim for valour and achievements than the legend on the Standard type. The latter therefore was issued in the beginning of his reign, and the other types above referred to, later in his reign, when he had won fresh

laurels in his northern and southern campaigns.

Mr. Allan thinks that the Lion-slayer type of Chandragupta II must have immediately succeeded the Chandragupta-KumaradevI type, because both have on their reverse a goddess seated on the lion with a cornucopia in her hand. He says that this type is found on no other coins attributed to Samudragupta and it is unlikely that a type afterwards so popular should have been dropped throughout his long reign. It may be pointed out that this reverse type, a goddess seated on the lion, is not really very popular in succeeding reigns, it is confined only to the lionslayer types of Chandragupta II and Kumāragupta I, and it was obviously suggested there by the presence of the lion on the obverse.

The greatest objection to the Commemoration Medal theory of Mr. Allan is the absence of the name of the commemorator on these coins. In the realm of Ancient Indian Numismatics we have several examples of Commemorative Medals being struck by succeeding rulers, but there is not a single case so far known of a ruler commemorating his parents or predecessors, but failing to put his own name or biruda on the commemorative medals. Agathocles and Antimachos Theos have issued a number of commemorative medals commemorating Alexander the Great, Antiochus Nikator, Didotos, Euthedemos, Demetrios 1 etc. They no doubt give the names and portraits of the heroes they commemorate on the obverse in the place of honour, but they are very particular to add their own name on the reverse. Eukratides has also done the same on the commemorative medals issued by him in memory of his parents Heliocles and Laodike.² If Samudragupta had really issued the Chandragupta-Kumāradevī type of coins as commemorative medals, it was in the fitness of things that the names and figures of his parents should have appeared on the obverse in the place of honour; but his own name or at least his biruda should have figured on the reverse. Samudragupta in issuing these commemorative medals must have been anxious to proclaim the fact of his filial devotion; as it is, there is nothing whatever on these so-called medals to show who had issued them. The absence of the name or biruda of Samudragupta on these coins is in my opinion the most convincing proof that they were not at all issued by him.

Lastly, it may be pointed out that we have some undoubted cases of commemorative medals struck by Gupta emperors. These are the Aśvamedha coins of Samudragupta and Kumāragupta I, which were undoubtedly struck to commemorate the performances of the Aśvamedha sacrifice by these emperors.

The legends on the reverse of these coins,

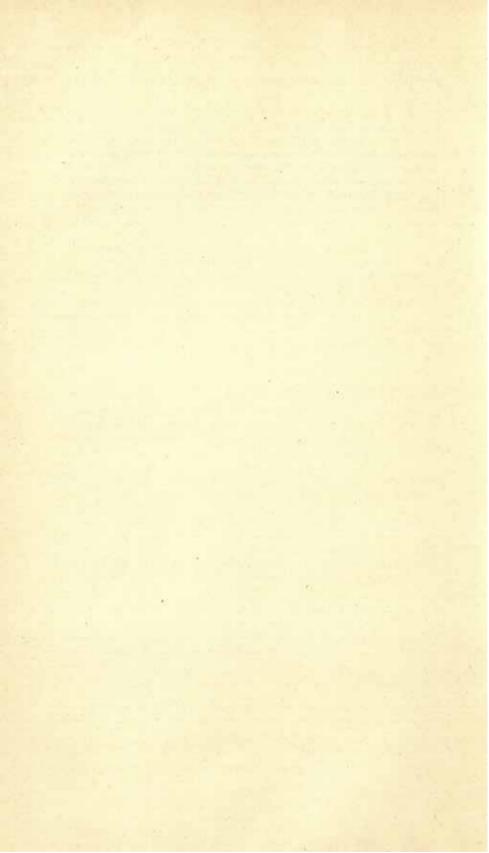
Aśvamedha-parākramah and Aśvamedha-mahendrah

contain the significant birudas parākrama and mahendra, which at once enable us to conclude that they were issued by Samudragupta and Kumāragupta I respectively. If we are to assume that like the above Aśvamedha coins, the Chandragupta-Kumāradevī coins are also commemorative medals, it is indeed strange that Samudragupta should not have at least put his biruda on them, as he has done on his Aśvamedha coins.

See Gardner, Catalogue of Greek and Parthian Coins, Pls. IV and XXX.
 Cambridge History of India, Vol. I, Pl. IV, No. 3.

It will be seen from the above discussion that the Chandragupta-Kumāradevī coins cannot be taken as com-memorative medals struck by Samudragupta; they were undoubtedly issued by Chandragupta I himself in his own reign. He had owed his rise to the alliance with the Lichchhavis and his wife was a queen regnant; he had therefore to stick to this type throughout his reign, or at least during the lifetime of his wife Kumāradevī.

A. S. ALTEKAR.



'The only copper coin that can with absolute certainty be ascribed to Kumaragupta I is in the Bodleian Library'. This interesting statement occurs in the British Museum Catalogue of Gupta Coins (B.M.C., p. xevii). As long ago as 1889 V. A. Smith made the same observation: 'Bodleian No. 751. Collected by Tregear, probably at Ajodhya. Unique . . . This is the only copper coin which we can affirm with certainty to have been struck as such by Kumaragupta' (V. A. Smith: The Coinage of the Early or Imperial Gupta Dynasty of Northern India, in J.R.A.S., 1889, p. 143). Tregear's collection was formed before 1848 and was acquired in that year by J. B. Elliot, who, eleven years later, presented it to the Bodleian Library. The discovery of a second specimen of a coin which had thus held the field as unique for the best part of a century is, therefore, of sufficient numismatic importance to be worth recording. This specimen, which is now in my cabinet, can, like the Bodleian coin, be ascribed with absolute certainty to Kumāragupta I; the obverse and reverse are almost identical, as will appear from the description given below, with that coin as listed and illustrated by Rapson in his 'Notes on Gupta Coins' (Num. Chron., 1891, Pl. II, 15).

Obv.: King standing l., wearing cloth and jewellery, with outstretched r. hand, probably holding a flower,

and I. hand resting on hip.

[Allan thinks that the king is 'apparently throwing incense on an altar' (B.M.C., p. 113) but careful examination of my specimen leads me to make the alternate suggestion that he is holding a flower like his predecessor Chandragupta II on some of his copper coins.]

Rev. : Garuda with outstretched wings standing facing.

[I may mention here that the Garuda represented on the copper coins is really the Garuda standard of the Gupta dynasty represented in full on the gold Gupta coins. The pedestal of Garuda consisting of two parallel horizontal lines with cross vertical lines indicates that the whole is the top of the Garuda standard.]

Legend on rev. : 몃숙호기속[북] (Śrī Kumāraguptaḥ).

Wt.: 27·3. S.: ·6 As regards the Bodleian coin the B.M. Catalogue informs us that its size is ·7 but its weight is not given by either Rapson or Allan; the obverse is without any legend while on the reverse Kumāragu[ptaḥ] is legible. My coin furnishes the honorific 'Śrī', which had already been read into the Bodleian coin by V. A. Smith, so that the complete legend is 'Śrī Kumāraguptaḥ'.

The Bodleian and my coin now share the distinction of being the only known specimens of what the B.M.C. describes as 'Type I' of Kumāragupta's copper coinage and which it will be our endeavour to show here is the only type of Kumāragupta's

copper coinage so far known.

The coin which Smith described as a copper coin of the 'Umbrella' type of Kumāragupta I (I.M.C., Vol. I, p. 116) is larger, thicker and heavier than the above described two coins and is probably a coin of Chandragupta II. Smith's reading of the legend on the reverse is conjectural as the coin is, as he himself admits, 'in very bad condition'. In 1889 Smith had written 'The existence of this type ('Umbrella' type) of Kumāragupta's coinage is perhaps doubtful, and rests on a single and very imperfect specimen ('The Coinage, etc.,' p. 142). That specimen had belonged to Sir A. Cunningham. It is unfortunate

that the Indian Museum coin is equally unsatisfactory.

Allan in the British Museum Catalogue has grouped together as 'Type II' three coins, one of which is in the Leningrad Collection, the second in the Indian Museum cabinet and the third was originally in Rawlins's collection. These three coins are so dissimilar to all known Gupta copper coins that they should be regarded rather as imitations of Gupta coins than as a genuine copper issue of Kumāragupta I. Owing to the debased style, Smith had at one time considered this type to belong to the Hūna series (J.R.A.S., 1907, p. 96) but later he ascribed the Indian Museum specimen to Kumāragupta II (I.M.C., Vol. I, There are strong reasons why these coins should not be assigned to any Gupta emperor, whether Kumāragupta I or The gold, silver and copper coins of the Gupta emperors are distinguished for their generally high artistic merit in design and execution; whereas the present coins exhibit crude workmanship. Smith erroneously read 'Sri To' for 'Sri Ku' on Rawlins's coin, as Allan has pointed out, but the significant fact remains that this coin was found in the Hoshiarpur District, Punjab, along with a number of Huna coins (J.R.A.S., 1907, p. 96 and pl. Fig. 1). Among Hūņa coins not a few are imitated from Gupta coins and these offer the nearest parallels to the group under discussion. Again the portrait of the king, whether head, bust or three quarter length, figures on the obverse of all Chandragupta II's copper coins except the very minute ones, on which we have his name instead. Similarly on the two authentic copper coins of Kumaragupta I described above we have a three

quarter length figure of the king on the obverse. On these three coins, however, although the field is large enough for a portrait of the king on the obverse, we find a different motif, viz., Simhavāhinī or the goddess Durgā seated on couchant lion, a well-known reverse type of Gupta gold coins, without the sharpness of relief of the original. All details seem to have been overlooked by the inexpert coiner so that the coins look as if they had been east in rough moulds and not struck with dies carefully worked with a graver like all the authentic issues of the Guptas. It is thus difficult to subscribe to the view that these coins were

issued by Kumāragupta I.

It would not be out of place to mention here that Allan's description of the reverse, (wrongly described as 'obverse') as figuring 'an altar' (B.M.C., p. 113) needs correction; as on Rawlins' specimen, which I have carefully examined, the lower part of Garuḍa is unmistakeable; again on the Indian Museum coin illustrated by Smith (I.M.C., Pl. xvii, 9) the figure of Garuḍa with outstretched wings can be clearly made out. Smith, too, originally described the device as an altar (J.R.A.S., 1907, p. 96) but rectified his error in the Indian Museum Catalogue (I.M.C., Vol. I, p. 120). Therefore, the reverse type of these three coins can be taken to be the usual reverse of Gupta coins, namely the Garuḍa, with a legend.

The so-called coins of Valabhi fabric, which have long intrigued numismatists, may next be considered in passing. They are generally of an irregular shape but similar in design to, though at times coarser in execution than, the western silver

issues of the Gupta emperors.

Nevertheless they are not forgeries as Bühler held (vide Smith's 'Observations on the Gupta Coinage ' at pp. 138 and 140) or imitations, as Smith originally thought ('The Coinage of the Early or Imperial Gupta Dynasty, p. 145). The latter, indeed, later became convinced (vide 'Observations on the Gupta Coinage', p. 139) that these coins are a genuine Gupta issue. They are of copper, plated with silver, though in a few instances the plating has completely disappeared. This silver plated currency was deliberately issued on a debased silver standard at a time when there was a great dearth of silver but they cannot be regarded as a copper coinage. The British Museum Catalogue, therefore, very properly includes them among the silver issues of Kumāragupta I.

Our conclusions in this paper may be briefly summarised as

follows :-

(1) Only two copper coins can be ascribed with absolute certainty to Kumāragupta I, namely Tregear's coin in the Bodleian and the coin in my cabinet. The obverse of these is: King in profile standing three quarters, holding flower in right hand and left on hip; the reverse: Garuda seated facing, with outstretched wings, and inscription below: Śrī Kumāraguptah.

(2) The so-called 'Umbrella' type of coin ascribed by V. A. Smith to Kumāragupta I is probably a coin

of Chandragupta II.

(3) The three copper coins, two figured in B.M.C., Pl. xviii, Nos. 25 and 26, and one in J.R.A.S., 1907, described on p. 96 and illustrated in the Plate as Fig. 1, are Huna imitations of Gupta coins. The obverse of these coins represents the goddess Simhavāhinī seated facing on lion 1, and holding probably pasa in right hand and an indistinct object, whether cornucopia or lotus in left; the reverse represents Garuda with outstretched wings seated facing, and inscription below : Śrī Ku.

(4) The coins of Valabhi fabric of Kumaragupta I are not

a true copper coinage.

AJIT GHOSE.

These two gold coins form part of a hoard discovered in village Pandwaha, Tahsil Garnatha, District Jhansi, U.P., in 1905, which included seven silver coins of the Adivaraha type issued by the Pratihara King Bhojadeva (circa 840-890 A.D.). The gold coins were acquired and presented to the Provincial Museum, Lucknow, by the United Provinces Government in November 1905, and were then registered as coins of 'Mediæval India'. Recently while preparing a list of gold coins in the Lucknow cabinet, I tried to study them and discovered that the obverse and reverse legends were identical. I took rubbings from the coins and forwarded them to Mr. K. N. Dikshit, Deputy Director General of Archæology in India, who very kindly read the inscriptions for me and held that they were the issues of Siddharāja (Jayasimha) the most renowned and powerful king of the Chaulukya (Solānki) dynasty of Anhilwada (Gujarāt). So far as I know, issues of this type and fabric are unknown and do not exist in any other Museum in India.

It would be worth while referring here to the exploits of Siddharāja. He was a distinguished ruler of the Chaulukya dynasty of Anhilwada in Northern Gujarāt which held sway in the eleventh and twelfth centuries A.D. and was the seventh ruler of the line (c. 1093-1143). He carried his victorious arms to Cutch on one side and Malwa in the north-east and was called Avantinātha in inscriptions. The Vadnagar Praśasti of the reign of his son Kumārapāla published in the Epigraphia Indica, Vol. I, page 295, speaks of his taking prisoner Yasovarman, the King of Malwa, and his possessing the 'philosopher's stone ', with the help of which he paid the debts of his subjects. He was a great patron of learning and arts and founded an era. It is thus natural that such a powerful ruler should have tried to strike his own coinage particularly after his dominions had touched those of Kanauj, where gold currency was in vogue. This, however, appears to have been in an experimental stage or

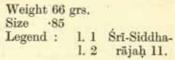
The two coins have an identical legend 'Siddharājah' on both sides in characters of the 11th-12th century A.D. The weight and size fairly corresponds to the gold coins struck by his contemporary, King Govinda-Chandradeva (c. 1112–1160), but the type is quite different, there being no effigy of any god or goddess on the reverse. The metal, no doubt, appears to be pure gold, free from alloy, but the irregular shape and the indistinct character of the impression rather unusual for gold, create doubt as to whether these pieces were intended for regular

currency, or struck for a special occasion, such as the conquest of Malwa.











Weight 65 grs. Size ·8. Legend: l. 1 '(Śr)ī-Siddha-rā-I. 2, jah 11.

PRAYAG DAYAL.

349. On CERTAIN UNPUBLISHED COINS OF THE SULTANS OF MALWA.

The history and coinage of this dynasty has been completely dealt with in the pages of the Numismatic Chronicle. The first exhaustive paper on the subject was published in Vol. III, Fourth Series, in the year 1904 by Dr. L. White King and the second which incorporated all the researches of the next twenty-seven years (1904–1931) was published in Vol. XII, Fifth Series, by Mr. H. Nelson Wright. In the present paper it is intended to describe a large number of such coins as have not been noticed hitherto. Almost all of these are from the cabinet of the Prince of Wales Museum, Bombay, a majority having been purchased from Mr. G. T. M. Hamilton of Allahabad. About two dozen coins from the collection of Mr. Ratilal M. Antani of Udaipur are also included herein, and are distinguished from the Museum collection by the letters a, b, or c, etc., added to the serial number.

Shapes.

Although the coins of Malwa were generally minted in square form, the round type was also issued by some of the rulers. Some of the rulers minted purely round coins, and others struck exclusively square issues, while there were some who seem to have issued both round and square coins:—

(a) The coins issued by Hoshang Shāh, Muhammad I and Kādir Shāh (under Māhmud III of Gujarat) are all round in shape.

(b) The coins struck by Māhmud II, Muhammad II, Ibrahim Lodi and Akbar, the Mughal Emperor.

are all square.

(c) The coins minted by Māhmud I, Ghiyās Shāh, Nāsir Shāh, Bahadur Shāh (of Gujarat), Muhammad Adil (Suri) and Bāz Bahadur are of both varieties, viz. the round and square in shape.

The coins catalogued in this paper are different from those published so far, in one way or the other. It is not deemed necessary to narrate such peculiarities in each case as can be seen in the body of the Catalogue. Only the few more important features which are of special interest are detailed below:—

(a) Coin No. 11 is a unique billon piece of Ghiyās Shāh as heir-apparent. The mint is Shādiābād, date (8)50 A.H. and the weight is 165 grains.

So far it was believed that Mahmūd had conferred on his son the privilege of striking coins between the year 862 and 868 H, because the coins of only those years had come to our notice. But the discovery of this singular piece proves that this privilege was conferred on Ghiyas Shah much earlier than 862 H. History is totally silent as to the date when Ghiyas Shah was proclaimed Heir-apparent and the theory that he was so appointed about the year 862 H, is based entirely on the data of coins known so far. We know from historical sources that Ghiyas Shah was taking part in the military operations with his father from a very early time. According to Farishta, this ruler as he had, during the last thirty-four years, been employed constantly in the field, fighting under the banners of his illustrious father, he now yielded up the sword to his son in order that he might himself enjoy ease the rest of his days (vide Brigg's Farishta, Vol. IV, p. 236). He ascended the throne in 873 H. and if he was fighting for thirty four years previously, he ought to be quite a strong and grown-up prince in the year 839 H., which is the year of his father's accession to the throne. We also know that Mahmud was always engaged in wars against his neighbouring kings from the time he ascended the throne. In the words of Farishta 'Scarcely a year passed that he did not take the field, so that his tent became his home and his resting place the field of battle '. This shows that the son was acting as a Commander under the banner of his father from the time of the latter's accession till his death in 873 H. and it seems quite safe and natural to suppose that Mahmud must have appointed his son Ghiyās Shāh as Heir-apparent some years after his accession. The year 850 H. in which this coin was struck cannot definitely be said to be the year when Ghiyas Shah was proclaimed the Heir-apparent. He might have been declared even earlier, but as this is the only piece so far known it carries the date of his becoming Heir-apparent back from 862 to 850 H.

(b) Coin No. 15 is another unique rupee of Sultan Ghiyās Shāh. The date is 877 A.H. and it weighs 164 grains. The legend on this coin is the same as on No. 33 of Mr. Wright, but it differs in shape, weight and date and is the earliest rupee of this Sultan.

(c) Coin No. 28 is the third unique silver piece of this Sultan. The weight of this tiny piece is 13.5 grains and as such is the lightest coin known so far in the Malwa series. According to the standard of 96 rati this is the one twelfth piece of a Tanka. (d) Coin No. 117a is the fourth unique silver coin of Baz Bahadur. It weighs 106 grains. The silver coins of this Sultan were not known so far and this is the only piece which has come to our notice.

All these four unique coins are round in shape.

(e) Up till now only one type of Baz Bahadur's coins was known (vide No. 98 of Mr. Wright). But in this collection three more types have been noticed.

These may be referred to in the body of the Catalogue at its proper order.

(f) Dr. White King has figured two coins of Akbar, the Mughal Emperor, but Mr. Wright has not mentioned any. In this collection there are two copper square coins of this ruler. The date 969 A.H., which is the year of the Mughal conquest of Mālwa, can be read on one and the mint Māndu on the other.

CATALOGUE OF COINS OF MALWA.

Hoshang Shāh.

A.H. 808-838=A.D. 1405-1435.

- R. 153 grains. A.H. 838. Similar to No. 2 of Mr. Wright 1 but date 838. This coin was struck in the last year of his reign.
- (2) Æ. 66 grains. Mint Shādiābād. Obverse legend is inscribed in a somewhat different way and M.M. No. 27 is to be seen both above and below the of ... Pl. 12
- (2a) Æ. 41 grains. Mint Shādiābād. Similar to No. 4 of Mr. Wright but smaller and M.M. No. 11.
- (2b) Æ. 28 grains. Mint Shādiābād. Similar to above but smaller and M.M. No. 20.

Muhammad Shāh I.

A.H. 838-840=A.D. 1435-1436.

(3) A. 159 grains. A.H. 839. Obverse legend same as on No. 5 of Mr. Wright.

¹ The article on 'The Coinage of the Sultans of Malwa ' by Mr. H. Nelson Wright, published in the Numismatic Chronicle, Fifth Series, Vol. XII, 1931.

Reverse :-

محمد

شاه بن هو شنگشاه اللطان

AT9 dim

Pl. 12

(4) Æ. 120 grains. Mint Shādiābād. Similar to No. 7 of Mr. Wright but in double the weight.

Māhmud Shāh I.

А.Н. 840-873=А.Д. 1436-1468.

(5). A. 169 grains. A.H. 841. Mint Shādiābād.

Similar to No. 8 of Mr. Wright but is dated أحدى و أربعين و تماتماية i.e. 841 A.H.

The date and mint inscribed on the circular margin is quite distinct and this is probably the earliest gold coin of this Sultan.

(5a) Sq. Billon. 150 grains. A.H. 868.

Similar to No. 13* of Mr. Wright, but date ATA, the middle figure written in reverse order.

(6) Billon. 92 grains, A.H. 848, Mint Shādiābād.

Similar to No. 14 of Mr. Wright. The coins of this type generally weigh from 125 to 142 grains, but this coin which weighs only 92 grains is surely of a smaller denomination not known so far.

(7) Billon. 134 grains. A.H. 858. Mint Shādiābād.

This coin is also similar to No. 14 of Mr. Wright but is dated 858 a.H. Mr. Wright says that the dates known on this type are from 845 to 853 a.H. but the date on this coin is unknown so far.

- (7a) Billon. 60 grains, Mint Shādiābād. A.H. (85)2. Similar to No. 16 of Mr. Wright but date 852.
- (8) Billon. 61 grains. A.H. 853. Mint Shādiābād. This is similar to No. 16 of Mr. Wright but is dated 853 A.H. The dates known so far are 845, (84)7, 848 and 854 A.H.
- (8a) Billon. 52 grains. Mint Shādiābād.

Similar to No. 17 of Mr. Wright, but محضرت شاد یا باد in the margin and not date as in No. 17 of Mr. Wright.

(8b) Billon. 36 grains.

Obverse:-

السلطان الحليم الكريم علا الدنيا و الدين Reverse:-

ابو المظفر خلج محمود شاہ

M.M. No. 65 to left of Je.

The arrangement of legend is somewhat different from No. 18a of Mr. Wright. Pl. 12

- (9) Sq. Billon. 37 grains. A.H. (8)70.
 Similar to No. 19 of Mr. Wright which has no date.
 The date on this coin can be read as (8)70 A.H.
- (10) Æ. 17 grains. Mint Shādiābād.
 Similar to No. 22 of Mr. Wright except in weight.
 This coin which weighs only 17 grains is supposed to be the third lightest coin struck by the Mālwa Sultāns.
- (10a) Æ. 51 grains. A.H. 872. Mint Shādiābād. Similar to No. 25 of Mr. Wright but date 872.

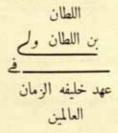
Ghiyās Shāh.

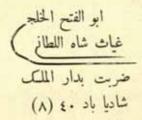
A.H. 873-906=A.D. 1468-1500.

I. As Heir-apparent.

Unique. (11) Billon. 165 grains. а.н. (8)50. Mint Shādiābād.

Obverse: Reverse:





Pl. 12

II. In his own right.

(12) Sq. A. 170 grains. A.H. 885.
Obverse:—Similar to No. 31 of Mr. Wright but no M.M. Reverse:—Similar to No. 31 of Mr. Wright but M.M. No. 9 and date 885.

- 124 N. Journal of the Royal Asiatic Soc. of Bengal [Vol. III,
- (13) Sq. N. 169 grains. A.H. 890.
 Obverse:—Similar to above but M.M. Nos. 5 and 13.
 Reverse:—Similar to above but date 890.
- (14) Sq. A. 168 grains. A.H. 891.

Obverse: -Similar to above but M.M. No. 14.

Reverse: -Similar to above but date 891.

The dates and M.M. on all these three coins are unpublished so far.

Unique. (15) R. 164 grains. A.H. 877. Size 1·1 inch.

Obverse:—Legend same as on No. 33 of Mr. Wright but no M.M.

Reverse:—Legend same as on No. 33 of Mr. Wright but date 877. Pl. 12

(16) Sq. R. 71 grains. A.H. 885.
Similar to No. 34 of Mr. Wright, but no M.M. on obverse, and date (8)85 A.H. on the reverse.

(17) Sq. R. 80 grains, A.H. 894.
Similar to above but M.M. No. 8 on obverse; and date 894 on the reverse.

- (18) Sq. A. 82 grains. A.H. (8)95.
 Similar to above but M.M. No. 53 on obverse; and date (8)95 on the reverse.
- (19) Sq. R. 79 grains, A.H. (8)95.
 Similar to above but M.M. Nos. 53 and 74 on obverse; and date (8)95 on the reverse.
- (20) Sq. R. 81 grains. A.H. 898.
 Similar to above, but M.M. No. 5 on obverse; and date 898 on the reverse.
- (21) Sq. A. 83 grains. No date. Similar to above, but M.M. No. 16 on the obverse.
- (21a) Sq. R. 82 grains. A.H. (8)92.
 Similar to No. 35 of Mr. Wright, but date (8)92 and M.M. No. 14.
- (21b) Sq. R. 84 grains. A.H. (893). Similar to above, but date (8)93.
- (22) Sq. R. 83 grains. A.H. (8)95.
 Similar to No. 35 of Mr. Wright, but new M.M. No. 1 and No. 74 on obverse. This M.M. is somewhat different from No. 72 of Mr. Wright.
 Pl. 12

- (23) Sq. A. 80 grains. A.H. (8)95. Similar to above but M.M. No. 17 on the obverse. This M.M. is not known so far on this type of coins.
- (24) Sq. R. 81 grains. A.H. 904. Similar to above but M.M. Nos. 12 and 17 on obverse; and date 904 on the reverse.
- (25) Sq. A. 83 grains. A.H. 906. Similar to above but M.M. No. 19 on obverse; and date 906 on the reverse. The dates 904 and 906 were not known so far on this type of coins.
- (25a) Sq. A. 41 grains. A.H. (8)94. Similar to No. 36 of Mr. Wright but date (8)94 and M.M. No. 4.
- (26) Sq. A. 21 grains. A.H. (8)96. Similar to above, but M.M. No. 16 and date (8)96 on the obverse.
- (27) Sq. At. 20 grains. No date. Similar to above, but M.M. No. 5.

Unique. (28) R. 13.5 grains. No date.

Obverse:

Reverse:

غياث خلج

اللطان

Pl. 12

- (29) Sq. Æ. 275 grains, A.H. (8)85. Similar to reverse of No. 39a of Mr. Wright but M.M. No. 6 and date (8)85 in reverse form.
- (30) Sq. Æ. 248 grains. A.H. 885. Similar to above but date in correct form and weight 248 grains. In this case the weight is new.
- (31) Sq. Æ. 127 grains. A.H. (8)86. Similar to reverse of No. 40 of Mr. Wright but M.M. No. 9 and date (8)86.
- (32) Sq. Æ. 132 grains. A.H. (8)88. Similar to above but M.M. No. 6 and date (8)88.

- (33) Sq. Æ. 118 grains. Date Illegible. Similar to above but M.M. No. 38. This M.M. is new on this type of coins.
- (34) Sq. Æ. 130 grains. A.H. 878.
 Similar to reverse of No. 41 of Mr. Wright but M.M. No. 3 and date 878 H. This is the earliest coin struck in this type.
- (35) Sq. Æ. 123 grains. A.H. 896.
 Same as No. 41 of Mr. Wright but of much lesser weight.
- (36) Sq. Æ. 131 grains. A.H. (9)00.
 Similar to above but M.M. No. 17 and of heavier weight.
- (37) Sq. Æ. 128 grains. No date.

Obverse:—Similar to above but M.M. No. 53 over of of of... The M.M. on the reverse is hardly to be met on this class of coins.

Reverse:—Similar to above, but new M.M. No. 2 resembling to Sun. Pl. 12

(38) Sq. Æ. 118 grains. No date.

Reverse:—Similar to above but M.M. somewhat different from M.M. No. 19. In M.M. No. 19 there is a cluster of seven circles, one being in the centre while the other six on the sides. While in this case there is a cluster of six circles instead of seven and the arrangement being in the same order. Pl. 12

(38a) Æ. 52 grains.

Obverse : غياث شاه خلج من محمو د شاه Reverse:

اللطان

اللطان

M.M. No. 17 over lower .

Pl. 12

(39) Æ. 40 grains. A.H. 881.

Similar to No. 42 of Mr. Wright but round and smaller.

- (40) Sq. Æ. 69 grains. A.H. 890.

 Reverse similar to No. 43 of Mr. Wright but M.M. No. 11 over the upper من منا and date 890.
- (40a) Sq. Æ. 31 grains.

 Similar to above but no date and smaller. M.M. No. 17

 over lower المان أن أن

(40b) Æ. 33 grains. A.H. 888.

Obverse:

1937]

غياا_لخلج شاه ۸۸۸ Reverse:

و السلطان من السلطان

M.M. No. 1 of Dr. King. Pl. 12

N. 127

(41) Sq. Æ. 71 grains. A.H. (8)95.

Similar to No. 44a of Mr. Wright but M.M. No. 38 on to on obverse and lower to on the reverse.

(42) Sq. Æ. 69 grains. A.H. (8)94.
Similar to No. 45 of Mr. Wright but date (8)94 and M.M.
No. 5 on the reverse.

(43) Sq. Æ. 64 grains. A.H. 898.
Similar to above but date 898.

(44) Sq. Æ. 33 grains. A.H. 888. Similar to No. 50 of Mr. Wright but date 888 and smaller. The عاف cuts the غالث of لغة.

(45) Sq. Æ. 60 grains. A.H. (8)78.
Similar to No. 51 of Mr. Wright but date 878 and M.M. No. 3
over date. No M.M. on the reverse.

(46) Sq. Æ. 62 grains. A.H. 894.
Similar to above, but heavier and M.M. No. 3 over date.

(47) Sq. Æ. 64 grains.

Obverse:

غیاث شاه الخلج محمد د شاه Reverse:

New M.M. No. 1 in lower .

Pl. 12

Nāsir Shāh.

A.H. 906-916=A.D. 1500-1520.

(48) Sq. A. 169 grains. A.H. 907.
Similar to No. 52 of Mr. Wright but heavier. The weight of this coin with date 907 is given by Mr. Wright as 120 grains.

(49) A. 83 grains. A.H. 911.

Legend similar to No. 53 of Mr. Wright but M.M. No. 22 on obverse and No. 31 on the reverse.

- (50) Sq. A. 145 grains. A.H. 913. Size. 85.
 Similar to No. 55 of Mr. Wright but lighter and broader in size.
- (51) Sq. R. 16 grains. A.H. 910.

Similar to No. 57 of Mr. Wright but M.M. No. 23 and date 910.

The weight is only 16 grains and as such is the second lightest coin of the Mālwa Sultāns.

(52) Sq. Æ. 178 grains. A.H. 906.

Obverse-similar to No. 58 of Mr. Wright.

Reverse :-

ن السلطا بر ن م. م. M.M. No. 20.

The difference in No. 58 of Mr. Wright and this coin is that in the case of the former, the date is below the of المالات of and M.M. No. 20 is above the مالات مالات of while in this case the arrangement is different.

On the obverse of this variety of coins, a mark like this

is noticed. Dr. White King calls it a 'bar knot' and Mr. Wright says that 'The φ forms a knot in the centre of the coin'. My submission is that it is neither a bar knot nor the knot formed by φ in the centre of the coin but it is distinctly a mint mark, No. 46 as figured by Mr. Wright.

Other date: -- A.H. 907 (M.M. No. 20, Wt. 165 grains).

(53) Sq. Æ. 82 grains. A.H. (9)06.

Similar to above. This coin which weighs only 82 grains, is probably the half piece of the above variety. Half pieces in this variety are not noticed so far.

(54) Sq. Æ. 159 grains. A.H. 912.

Similar to above, but on reverse M.M. No. 24 and date 912 above lower and of المان of المان respectively.

(55) Sq. Æ. 163 grains. A.H. 915. Similar to above but M.M. No. 26 instead of No. 15.

(56) Sq. Æ. 132 grains. No date.

ناصر شاه الحلج

Obverse:

Reverse:

السلطان

.السلطان of س M.M. 68 over lower

Pl. 12

- (57) Sq. Æ. 67 grains. No date. . Similar to above but on the reverse M.M. No. 69.
- (58) Sq. Æ. 80 grains. A.H. 915. Similar to No. 60 of Mr. Wright but on reverse M.M. No. 26 instead of No. 15.
- (59) Sq. Æ. 75 grains. No date. Similar to above, but on reverse M.M. No. 22, which is not known on this variety of coins.
- (59a) Sq. Æ. 44 grains. A.H. (9)06. Similar to above but smaller. This piece is decidedly the half unknown piece of the above variety.

Māhmud Shāh II.

A.H. 916-937=A.D. 1510-1530.

(60). Sq. A. 168 grains. A.H. 919.

Similar to No. 64 of Mr. Wright, but date 919. This date is unknown so far and it was during this year that Muzaffar Shāh II of Gujarat who had marched against Mālwa, withdrew his army without coming in conflict with Mahmud's forces.

(60a) Sq. A. 77 grains. A.H. 911. Similar to No. 67 of Mr. Wright, but date 911 and M.M. No. 26 on obverse. This is the earliest dated coin in this variety.

- (61) Sq. R. 83 grains. A.H. 917. Similar to above, but M.M. No. 26 and 27 and not 26 and 28.
- (62) Sq. A. 83 grains. A.H. 918. Similar to above, but M.M. No. 26 and 22 and not 26 and 28.

(62a) Sq. R. 170 grains. A.H. 915.

Similar to No. 68 of Mr. Wright, but date 915 and M.M. No. 15.

This is the earliest dated coin in this variety.

- (63) Sq. A. 169 grains. A.H. 922.
 Similar to above, but M.M. No. 26 and 27.
- (64) Sq. R. 114 grains. A.H. 927.
 Similar to No. 69a of Mr. Wright, but the date which is new is 927 and M.M. No. 31, 40 and 52 on the obverse and M.M. No. 15 on reverse.
- (65) Sq. A. 84 grains. A.H. 961 or 921.
 Similar to No. 70 of Mr. Wright, but M.M. No. 26, 29 and 55 on the obverse and No. 27, 34, and new M.M. No. 4 on reverse.
 Pl. 12
- (66) Sq. Æ. 148 grains. A.H. 923.

 Similar to No. 69 of Mr. Wright but new M.M. No. 5 on obverse and No. 27 on reverse. Copper coins in this type are not known so far.

 Pl. 12
- (67) Sq. Æ. 157 grains. A.H. 918.

 Legend similar to No. 72 of Mr. Wright, but M.M. No. 22 in the ن on obverse and M.M. No. 26 above the upper علم and date 918 over the lower ما المطان on the reverse.
- (68) Sq. Æ. 134 grains. A.H. 917.

 Obverse: Reverse:

Similar to No. 73 of Mr. Wright محمود شاه الخلح بن ناصر شاه ستا M.M. No. 71. Pl. 12

(68a) Sq. Æ. 114 grains. A.H. 931.

Similar to No. 72 obverse of Mr. Wright but φ in place of φ .

- (69) Sq. Æ. 133 grains. A.H. 918.
 Similar to No. 74 of Mr. Wright but M.M. No. 32 and not No. 30 in the second \(\text{\text{c}}\) on obverse.
- (70) Sq. Æ. 127 grains. No date.

 Similar to above but M.M. No. 73 in the second ψ on obverse and no date.

- (71) Sq. Æ. 60 grains. No date. Similar to above but no M.M. visible on the obverse and M.M. No. 17 on the reverse. This is new in weight in this variety.
- (72) Sq. Æ. 135 grains. A.H. 919. Similar to No. 75 of Mr. Wright, but no M.M. on obverse, and M.M. No. 26 only and date on reverse.
- (73) Sq. Æ. 132 grains. A.H. 919. Similar to above but M.M. No. 31 in the & on obverse.
- (74) Sq. Æ. 124 grains. A.H. 961 or 921. Similar to above but M.M. No. 29 in the & on obverse and the centre digit in reverse form and M.M. No. 26 on reverse.
- (75) Sq. Æ. 55 grains. A.H. 922. Similar to No. 75 of Mr. Wright, but noteworthy in weight.
- (76) Sq. Æ. 123 grains. A.H. 922. Similar to above but M.M. No. 37 in the & on obverse.
- (77) Sq. Æ. 116 grains. A.H. 923. Similar to above but M.M. No. 4 on obverse and No. 26 and 29 on reverse.
- (78) Sq. Æ. 62 grains. A.H. 923. Similar to above but no M.M. on obverse and M.M. No. 26 and date on reverse.
- (79) Sq. Æ. 126 grains. A.H. 924. Similar to above but new M.M. No. 6 in the & on obverse. The mark which is entirely new resembles to a bird which is Pl. 12 probably a sparrow.
- (80) Sq. Æ. 125 grains. A.H. 924. Similar to above but M.M. No. 55 in the & on obverse and M.M. No. 40 and 46 on reverse.
- (81) Sq. Æ. 128 grains. A.H. 925. Similar to above but new M.M. No. 7 on the reverse. This is a new mark and differs a good deal from No. 41 and 76 of Pl. 12 Mr. Wright.
- (82) Sq. Æ. 125 grains. A.H. 926. Similar to above but M.M. No. 39 and 76 on reverse,
- (83) Sq. 126 grains. A.H. 927. Similar to above but new M.M. No. 8 on to on obverse. Pl. 12

- (84) Sq. E. 126 grains. A.H. 927. Similar to above but M.M. No. 26 in the $\dot{\varphi}$ on obverse.
- (85) Sq. Æ. 123 grains. A.H. 928. Similar to above but new M.M. No. 9 in the $\dot{\phi}$ on obverse. Pl. 12
- (86) Sq. Æ. 123 grains. A.H. 928.

 Similar to above but M.M. No. 15 in the $\overset{\circ}{\smile}$ on obverse and M.M. No. 40 and 52 on reverse.
- (87) Sq. Æ. 127 grains. A.H. 928.
 Similar to above but M.M. No. 15 in the & on obverse, and M.M. No. 40 and 42 on reverse.
- (88) Sq. Æ. 63 grains. A.H. 928.
 Similar to above but no M.M. and smaller.
- (89) Sq. Æ. 45 grains. A.H. 929.
 Similar to above but legend on both sides in the reverse order. M.M. No. 40 on reverse and much smaller in weight.
- (90) Sq. Æ. 122 grains. A.H. 930.
 Similar to above but no M.M. on obverse and M.M. No. 29 and 40 on reverse.
- (91) Sq. Æ. 126 grains. A.H. 930.
 Similar to above but no M.M. on obverse and M.M. No. 40 and 52 on reverse.
- (92) Sq. Æ. 126 grains. A.H. 931.
 Similar to above, but no M.M. on obverse and M.M. No. 29 and 40 on reverse.
- (93) Sq. Æ. 57 grains. A.H. 931. Similar to above but no M.M. on obverse and M.M. No. 40 on reverse and smaller.
- (94) Sq. Æ. 126 grains. A.H. 934.
 Similar to above but no M.M. on obverse and M.M. No. 29 and 40 on reverse.
 Other dates:—935 (weight 125 grains); 936 (weight 122 grains); 937 (weight 125 grains).
- (95) Sq. Æ. 68 grains. No date. Similar to No. 78 of Mr. Wright, but M.M. No. 26 and 29 on reverse.
- (96) Sq. Æ. 62 grains. No date. Similar to above but M.M. No. 29 and 40 on reverse.
- (97) Sq. Æ. 29 grains. No date. Similar to above but about half in weight.

(98) Sq. Æ. 55 grains. No date. Obverse similar to No. 79 of Mr. Wright, but no M.M. Reverse similar to No. 78 of Mr. Wright, but M.M. No. 18, below the upper & No. 40 over the lower & and new M.M. Pl. 13 No. 10 above the upper b.

(98a) Sq. Æ. 36 grains. A.H. 917. Similar to No. 81a of Mr. Wright, but date 917.

(99) Sq. Æ. 114 grains. Date 1714. Similar to No. 83* of Mr. Wright, but date 1714; below (inverted) राजामां(गा).

Muhammad II.

А.Н. 917-921.

(99a) Rectangular, Æ. 135 grains. A.H. 922 in reverse form. Reverse: Obverse:

محمد شاه خلج بن ناصر بن شاه

السلطان السلطان

779

M.M. No. 27 and 38.

M.M. No. 17. Pl. 13

Bahadur Shāh of Gujarat.

А.н. 937-944.

(100) Sq. Æ. 57 grains. A.H. 939.

Obverse:

Reverse:

(بهادر شاه) بن مظفر شاه البلطا

M.M. 29 over upper b M.M. 40 over lower b of السلطان Pl. 13

134 N. Journal of the Royal Asiatic Soc. of Bengal [VOL. III

(101) Æ. 136 grains. A.H. 949.

Obverse:

Reverse:

بهــــادر شاه بن مظفر شاه السلطان

Pl. 13

(102) Æ. 141 grains. A.H. 940.

Obverse:

Reverse :

(۱)لد(ین) الدنیا و قطب مهم الوالفضل Similar to No. 89 of Mr. Wright.

New M.M. No. 11 above 'э.'. Other date:—941 а.н.

Pl. 13

(103) Æ. 192 grains. A.H. 942. Obverse:

> الدين الدنيا و (نا)صر ابوالفضل

Reverse:

Similar to above.

M.M. No. 51 above '.'.

Pl. 13

(104) Æ. 183 grains. A.H. 944.

Obverse:

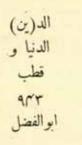
Similar to above but M.M. No. 55 above 'y'. Reverse:

Similar to above.

(105) Æ. 122 grains. A.H. 943 on both sides.

Obverse:

Reverse:





New M.M. No. 12 on 'y'.

Qādir Shāh (in his own name).

(106) Sq. Æ. 102 grains. No date.

Obverse:-

Fragments of legend found on Mahmud III of Gujarat's copper coins. Reverse :-

In double sided square. (ق) ادر

Lower portion illegible and M.M. No. 5.

Pl. 13

(106a) Sq. Æ. 46 grains. No date. Similar to above but smaller.

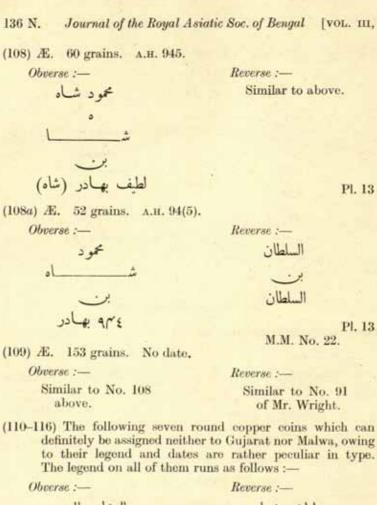
Qādir Shāh (Mahmud III of Gujarat).

(107) Æ. 124 grains. A.H. 945.

Obverse:

محود لطيف شــــا بن Reverse :-

Similar to No. 90 of Mr. Wright.



Obverse:

 الطيف شاه الدنيا و الدين و الوالفضل و الوالفضل

On the first four or five coins the Malwa marks Nos. 20, 29 and 34 are found but on the last two no marks are visible. The dates 942 and 945 to 947 A.H. are found on them. They weigh 174, 150–153 and the smallest 51 grains.

Muhammad Ādil (Bāz Bahadur Governor).

(117) Sq. Æ. 49 grains. No date.
Similar to No. 96 of Mr. Wright, but much smaller.

Bāz Bahadur,

аль. 963-968.

Unique. (117a) R. 106 grains. No date.

Obverse:-

Reverse :-

The Kalima.

(با)ز بهادر شاه سلطان خلد الله لمللة

M.M. No. 29 and 34.

Pl. 13

(118) Sq. Æ. 52 grains. No date. Similar to No. 98 of Mr. Wright, but half piece.

(119) Sq. Æ. 103 grains, A.H. 965.

Obverse:-

باز بهادر شاه خاد الله

M.M. No. 22.

Reverse:-

Similar to No. 98 of Mr. Wright.

Pl. 13

(120) Sq. Æ. 107 grains, A.H. 96X.

Obverse :- . .

(باز) بهادر شاه السلطا

M.M. No. 22.

Reverse :-

97 X

Pl. 13

(121) Sq. Æ. 52 grains. Similar to above, but half piece.

(122) Sq. Æ. 52 grains. A.H. (9)65.

Obverse :-

Reverse:-

75 卐 ク

M.M. No. 73.

Pl. 13

Obverse :-

جلال الدين

Reverse :-

Pl. 13

(124) Sq. Æ. 54 grains. Mint Mandu.

Obverse:

Reverse :-

Similar to above.

Pl. 13

C. R. SINGHAL.











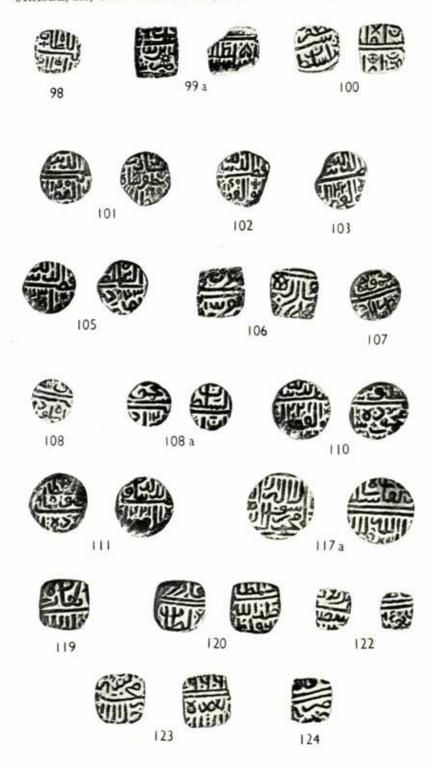




38 a

40 b







A. TABLE OF NEW MARKS FOUND ON MALWA COINS.

1	2	3	4
%	*	83	2
5	6	7	8
\mathfrak{A}	**	革	7
9	10	11	12
*	φ	æ	*
, ,			

B. NUMBER OF COINS ON WHICH THESE MARKS OCCUR.

Mark No.	Coin No.	Mark No.	Coin No.
1	22 and 47	7	81
2	37	8	83
3	38	9	85
4	65	10	98
5	66	11	102
6	79	12	105



The collections of Indian coins described here were made by Colonel C. Seton Guthrie, R.E., Doctor J. Gerson da Cunha of Bombay, and Pandit Ratan Narain of Delhi, and belong to the latter half of the nineteenth century. The first two are of outstanding character; I select the third from the minor collections of the period. Colonel Guthrie's activities cover the third quarter of the nineteenth century. After his death in 1875, his coins were purchased by the German Government in 1876 and are in the Kaiser Friedrich Museum, Berlin. It was in the same year 1876 that Dr. da Cunha began to collect. His coins were sold by auction in 1889 at Sotheby's Rooms in London and he died in 1900. Pandit Ratan Narain was an official of the District Court at Delhi, and his cabinet shows what could be done in that ancient capital by a man of small means; the Pandit died in the year 1887 or 1888. Rodgers, the author of the Lahore and Indian Museum Catalogues written in the eighteen nineties, has noted that the Ratan Narain collection went to the United States of America as it was purchased by Durkee, a citizen of Chicago (or New York). Durkee's Gauntlet Brand Select Spices and Mustard, also Oriental Salad Dressing are advertised in Lippincott's Monthly Magazine, Philadelphia, I understand that the coins were left to the Metropolitan Museum, New York. They are now in the Museum of the American Numismatic Society, New York, where I had the pleasure of seeing them in the summer of 1921. Dr. da Cunha was an active member of learned Societies and the author of noteworthy monographs and papers on history, coins and kindred subjects. I have not found any publication by Colonel Guthrie or by Pandit Ratan Narain.

The background of this study is provided by the allusions in the writings of that fine numismatist Mr. Charles J. Rodgers of Amritsar, whose catalogues I have already mentioned. He was an ardent collector in the Punjab from about the year 1870, and a regular contributor on numismatic and historical subjects to the Journal of the Asiatic Society of Bengal and other periodicals from 1879 almost till his death in 1898 (1). These papers were beautifully illustrated by his own drawings (2). Mr. Rodgers belonged to the numismatic tradition of Sir Alexander Cunningham with whom he was a regular correspondent. At first a worker in the same field, that of the ancient coins of India, he soon quitted it to specialize in the issues of the Delhi dynasties. His cabinet was purchased by the Punjab Government and catalogued by himself. I examined Treasure Trove on behalf of the Government of the Punjab for thirteen years from 1907

and became familiar with the writings of the man who was doing the same work till ten years previous to myself. Rodgers' papers and the introductions to his Catalogues are enlivened by expressions of personal opinion and references to forgotten worthies. There are repeated tributes of respect and veneration to his 'numismatic father and teacher', that 'prince of Indian numismatists' General Sir Alexander Cunningham, whose cabinet was 'beyond and above all present collections'. Although Cunningham wrote his first coin paper in 1840, he overlapped Rodgers as an active worker by a quarter of a century and died only five years before him. Both Cunningham and the great Edward Thomas were awarded the Medal of the Numismatic Society of London (now R.N.S.) in the years 1886 and 1885, respectively, and the latter is in the Dictionary of National Biography.

Rodgers was handicapped throughout by lack of money; he lived and died a poor man. He says that he had to let precious things slip through his hands, or purchased them for sale to obtain funds for his Mughal series. He names three rarities which he always regretted letting go, the heavy rupee of Humayun found at Saharanpur, the rupee of Shah Jahan with name Khurram obtained in Lahore, and the rupee of Shah Shuja Muhammadi acquired at Delhi. Still they were not lost to posterity as all three are in the British Museum. One of my earliest finds in Delhi was another piece of the same Mughal claimant Shah Shuja, and I ultimately possessed three. A second Khurram rupee was in the Ratan Narain collection and a fine heavy rupee of Humayun showing the mint Agra in the Guthrie cabinet. The latter issue is a restoration piece and marks a

new epoch as it is the first Mughal rupee (3).

The references to Rodgers' co-workers are invaluable for a history of Mughal coin collecting. He was full of enthusiasm and missionary zeal, and was equally anxious that the Indian Museums should get their fair share. This was the reason why he repeatedly drew attention to collections which he hoped might be acquired. In 1880 no Museum in India had a coin catalogue; while the Calcutta Museum was destitute of coins, the Berlin Museum was getting everything good in Europe. For a long time there was no response to Mr. Rodgers' efforts. Eventually the Punjab Government purchased the bulk of his cabinet and financed the production of a Catalogue without a single illustration. Rodgers' Suri and Sikh coins are in the Madras Museum.

In J.A.S.B., 1880 there are references to C. R. Stulpnagel, Pandit Ratan Narain and J. G. Delmerick. The last named was an Extra Assistant Commissioner, and a contemporary of Ratan Narain in Delhi. The J.A.S.B. for 1881 and 1882 contained papers by A. F. R. Hoernle. Rodgers was then in the full tide of his activity. Collections mentioned by him are those of the Rev. J. Doxie (4), Alexander Grant and W. Theobald. By 1884 Vincent Smith was writing about Gupta coins and J. Gibbs on Ramatankas. A year later Rodgers mentions L. White King, 'a most indefatigable numismatist'. In 1886 appears the name of J. D. Tremlett, Judge of the Chief Court, Lahore, (5), also of Dr. da Cunha as the owner of some fine coins of the Delhi Sultans. On p. 192 of J.A.S.B., 1886 there is an allusion to the cabinets of Sir E. C. Bayley, Edward Thomas, Alexander Grant and Cunningham; all the coins of a Colonel Stacey are said to have gone to Berlin. In the Preface to Part IV of the Punjab Museum Catalogue, Calcutta 1895, Rodgers mentions the collections of Eugene Leggett of Karachi, of Dr. Stulpnagel and Tom Higgins of Lahore, of Pandit Ratan Narain of Delhi, and of an Indian Army General whose name is not given (6). All had been dispersed and from them no Indian Museum had derived one single coin. This was regrettable but the first part is not true of the Ratan Narain cabinet; it has found an appreciative and permanent home in the New World.

Rodgers was a constructive and unselfish lover of his art.

His criticisms were impelled by an abiding desire to create and improve facilities for the study of coins in India as historical documents, and for the proper use of Indian Museums and of Provincial Coin Cabinets. He reaped some reward during his

lifetime but nothing like the response he deserved.

There is little to be gleaned about Colonel Charles Seton Guthrie, R.E., apart from his prominence as a coin collector. I gather that he was of good Scotch stock, possessed considerable means, and lived at one time in Great Russell Street. He was certainly in touch with the British Museum and with experts like Edward Thomas. We are told in the obituary notice that his quiet and private life, aided by an ample fortune, enabled him in a remarkable manner to promote the study of Oriental Numismatics, though he was not the author of any memoir on the subject (7). Colonel Guthrie was a keen collector for many years in India till the very day of his sudden and unexpected death. It was understood that Colonel Guthrie's collection which amounted to 1340 A., 7100 R. and 10,000 Æ, had been offered to the German Government for the moderate sum of £5,000. There was no catalogue beyond that of the coins of the early Khalifas prepared by Stanley Lane Poole.

This magnificent collection was actually purchased by the German Government in the year 1876; it is in the Kaiser Friedrich Museum, Berlin. Its importance had been foreshadowed by the numerous references to 'the choice Pathan series' in Edward Thomas's classic work *The Chronicles of the Pathan Kings of Delhi*, London, 1871. At the time of writing, the collection was in England. Three years later Stanley Lane Poole published a catalogue of the coins of the Amavi Khalifas in the Guthrie cabinet (8). 'The series which it describes is scarcely, if at all

inferior to the corresponding portion in the British Museum." It will be realized with what excitement I anticipated seeing this great collection about which so little was known. I visited Berlin in the spring of 1922 and was received with great kindness by Dr. Regling and his staff. I am much indebted to him for the generous permission to describe unpublished coins. The character of the Mughal section is apparent when I say that Colonel Guthrie possessed thirty-four zodiacal mohurs. of the Emperor Jahangir covering all twelve signs, mostly in mint state, together with three or four portrait mohurs of Jahangir, superb hawk mohurs of Akbar struck at Asir and Agra mints and a silver mehrabi coin of Akbar. The zodiacal pieces included the gold and silver Ram of Fathpur mint, a gold Gemini of Aimir and a silver Capricornus of Lahore mint. An outstanding piece is the rupee of Humayun's restoration period which shows the mint Agra quite clearly (9). The Pathan section needs no commendation from me. I saw several interesting pieces still unpublished; the most curious of these is a billon coin of Sikandar Sur modelled on the billon issues of Sikandar Lodi. Mr. H. Nelson Wright has been allowed to include these in his forthcoming comprehensive work on the money of the Delhi Sultans. Ancient coins are not lacking. Two Indo-Bactrian drachms of Telephus were published and illustrated in A von Sallet's Die Nachfolger Alexanders des Grossen in Baktrien and Indien, Berlin, 1879 (10). I fear, however, that neither specimen is genuine.

J. Gerson da Cunha was born at Arpora (Goa) on the 3rd February, 1844; he was the eldest son of Francisco Caetano da Cunha, Lieutenant Commandant of the Fort of Baga, to whom he dedicated his History of Chaul and Bassein. He qualified for the medical profession in London and Edinburgh, and returned to Bombay in 1867, in which city his career of useful medical work only ceased with his death, which occurred at his residence in Bombay on the 3rd July 1900 (11). He was a man of learning and culture and became a regular contributor of papers on antiquarian subjects, mainly to the Journal of the Bombay Branch of the Royal Asiatic Society. He was well equipped for the pursuit of these studies as in addition to his knowledge of Indian languages, he spoke English, French, German, Italian as well as his mother tongue Portuguese. As a coin collector da Cunha specialized in Indo-Portuguese money and in the issues of the European Companies, though his cabinet included typical and valuable specimens covering the whole range of Indian numismatics. He joined the Bombay Branch of the Royal Asiatic Society in 1873. In 1889 he was made a Joint Secretary, especially in connection with numismatics, and became in addition a Vice-President in the year 1892, holding this office till his death in 1900. I had the pleasure of meeting Mrs. da Cunha and her daughter Miss Olivia da Cunha in Bombay in January, 1919.

A Catalogue of the Coins in the Numismatic Cabinet belonging to J. Gerson da Cunha was published in four parts at Bombay in the years 1888 and 1889. The author's distinctions and corresponding memberships, beginning with Knight of the Order of St. Gregory the Great and of the Order of the Crown of Italy. occupy thirteen lines of small print; I am informed that in addition to all these he was Knight Commander of the Literary and Scientific Order of St. James of Portugal. There is a notice of the collection in the Revue Belge de Numismatique for 1888, 'Le Medaillier du Dr. da Cunha a Bombay', contributed by A. Engel who says that Dr. da Cunha began to collect in 1876 and by 1888 had accumulated 27,000 coins. Like Colonel Guthrie, he was a collector on the grand scale. The coins cover almost the entire field of numismatics outside Mediæval and Modern Europe: but I think the collection suffers from this diffusion of effort. Within the scope of this paper I can give little more than brief statistics. The First Part of the Catalogue described the gold and silver series of the Oriental Khalifate, 375 A and 717 A a total much in excess of that of the existing British Museum Catalogue. The Second Part is devoted to miscellaneous Muhammadan coins of countries outside India, 1,875 in number, including a large proportion of gold pieces. Part Three is a catalogue of the gold and silver Coins of the Musulman Dynasties of India. The coins of the Delhi Sultans are moderate. There is a gold piece of the Sultans of Kashmir like Num. Chron., 1933, Pl. XXI, 1—Bahmani coins number 7 A and 27 R. The finest section is that of the Mughal Emperors; the pieces catalogued number 236 A and 608 R. Gold coins of Akbar include eleven ilahi mohurs of Agra and Lahore mints, and a hawk mohur of Asir. If correctly described, the mohur of Sarhind mint, date 50, Aban, is new. There are two portrait and seventeen zodiacal mohurs of Jahangir, including the complete set purchased from James Gibbs, The latter had been described by Gibbs himself in Notes on the Zodiacal Rupees and Mohurs of Jehangir Shah, J.B.B.R.A.S., 1878. The author relates that he had collected coins from the time he first came to India in 1846. The Gibbs cabinet and that of Dr. Bhau Dhaji were purchased en bloc by Dr. da Cunha. I note that the unique Cancer mohur of Nur Jahan is correctly attributed to Kashmir mint in the da Cunha Catalogue (12). There are 67 N of Shah Jahan. Amongst the later Mughalgold is a Burhanpur mohur of A'zam Shah. The silver pieces are a representative lot. The Fourth Part of the Catalogue describes 5,000 miscellaneous coins struck in India and elsewhere; these again include some hundreds of gold pieces. I have no doubt that the best series are those of Portuguese India and of the Sassanian dynasty. Dr. da Cunha did not possess a gold Sassanian coin but had 760 silver.

Dr. Da Cunha proposed to print a Fifth Part of the Catalogue in which he hoped to describe a fine set of Ramtankas, of coins of Southern Indian and other Hindu dynasties, and a separate lot of rare pieces which he had reserved for a special memoir. There were in addition the vast series of the copper issues of Muslim dynasties of India. As far as I know these supplementary Parts never appeared. Perhaps the author was discouraged by the results of his London sale in 1889 (13). Not only was there poor publicity but the Sale Catalogue was a hand list of the briefest kind without a single illustration; the coins were put up in lots varying in number from two or three to 18, 35, 55, and 'a parcel'. Nothing could have been more disastrous from the point of view of a good sale, and the coins went at pitiful prices, To quote Mr. C. J. Rodgers, 'These coins are interesting to our Mahomedan fellow subjects in India, and should have been secured for the Museums of the country. Unfortunately no one in authority in India knew of the sale of these coins in London, and so they were dispersed, realizing for the indefatigable and learned collector scarcely their intrinsic value '.

A hand list of the Ratan Narain collection was printed in the year 1888 and circulated for the purpose of selling the coins (15). A Foreword states that the Pandit's father was a Tahsildar in the Delhi District. The son entered Government service and became Nazir in the District Court of Delhi. He chose to remain in this comparatively unimportant post till his death. Being passionately fond of old coins, he devoted almost the whole of his leisure to their collection. The Pandit intended to publish a Catalogue on his retirement but did not live long enough. The great bulk of the coins are pieces of the Delhi Sultans and Mughal Emperors. The printed list is of little use from the point of view of accurate identification but it is clear that the cabinet contained many rarities. There are one-hundred and ten gold coins including nine zodiacal mohurs of Jahangir, two gold pieces of A'zam Shah, one of Kam Bakhsh and two of Muhammad The silver and copper coins were tabulated in some nine hundred items; there are rupees of Dawar Baksh, Bedar Bakht and Bahadur Shah. The existence of other good coins is clear from those I have been kindly allowed to publish by the American Numismatic Society. (9). The Pathan coins are a fine lot. Noteworthy items are rupees of Eltutmish, Raziva, Bahram, Kaiumurs, Khusru and Sikandar Sur.

The twentieth century ushered in a new era with the appearance of the First Numismatic Supplement to the J.A.S.B. in the year 1903. The names of the contributors are well known, the late Dr. G. P. Taylor of Ahmedabad, Mr. R. (now Sir Richard) Burn and Mr. H. Nelson Wright. These three formed the nucleus of the meeting in Mr. Nelson Wright's house at Allahabad when the Numismatic Society of India was founded in December, 1910. The first President was the late Sir John

Stanley, Chief Justice of the Allahabad High Court; I was Secretary and Treasurer for the first ten years of the Society's existence. At the end of the first year the total membership amounted to 46. The Society has continued to grow and flourish, and it happily celebrates its Silver Jubilee in the month of writing, December, 1935.

APPENDIX.

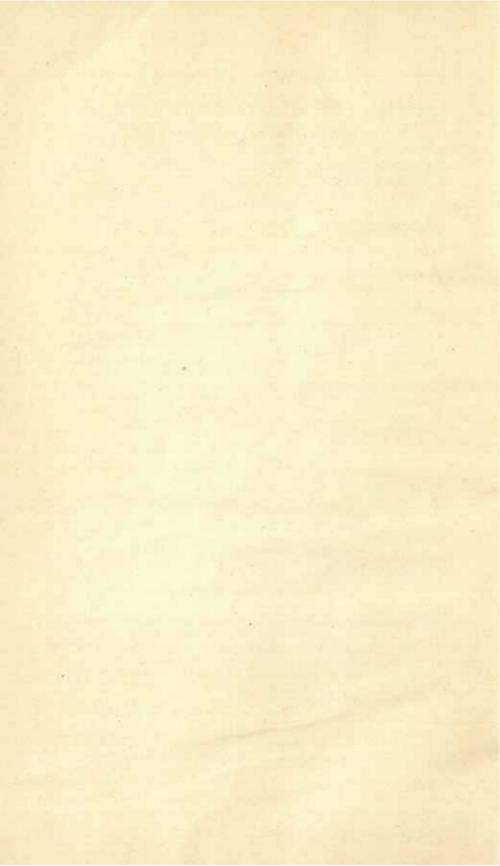
- (1) There is an obituary notice on p. 26 of Proceedings of the London Numismatic Society, 1898-99.
- (2) Mr. Rodgers' only successor in this line has been the late Mr. W. H. Valentine, F.R.N.S.
- (3) For recent descriptions of all three pieces see Num. Chron. 1923 and 1926. Another coin of Shah Jahan with name Khurram is the unique couplet nisar, Num. Chron., 1930.
- (4) The Rev. J. Doxie was a missionary in Kashmir. I saw his coins in the cabinet of the late Mr. R. Sutcliffe, Burnley, Lancashire.
- (5) The Tremlett collection, small and choice, is in the Fitzwilliam Museum, Cambridge.
- (6) Attention is invited to the Coin Bibliography on pp. XVII to XIX of Mr. Rodgers' Catalogue of the Coins in the Government Museum, Lahore (Calcutta, 1891); also in the same author's Coin collecting in Northern India, Allahabad, 1894. I add those references:—

Catalogue of Rare and Valuable Coins, the Property of Mr. Eugene Leggett, Karachi, Sind. Printed by the Sind Gazette, Karachi. No year, pp. 79.

List of Coins of the Late Dr. C. R. Stulpnagel. Prepared by Mr. Chas. J. Rodgers about 1895. Printed by Traill and Co., Calcutta. No year, pp. 39.

- (7) Proceedings of the Numismatic Society of London, June, 1875.
- (8) Col. Guthrie's Cabinet. Fasc. I. Stanley Lane Poole, Hertford, 1874.
- (9) Some Notable Coins of the Mughal Emperors of India. Num. Chron., 1923, 1926. The Portrait Coins of Jahangir. Num. Chron., 1929. The Zodiacal Coins .- Num. Chron., 1931.
- (10) P.M. Cat., 1914, Vol. I, pp. 4, 87.
- (11) There are obituary notices in Proceedings of the B.B.R.A.S., 1900 and in Spink's Numismatic Circular, December, 1900.
- (12) The Zodiacal Coins of Jahangir. Num. Chron., 1931, pp. 111, 127.
- (13) Catalogue of the Highly Important and Valuable Collection of Oriental Coins formed by J. Gerson da Cunha. Sotheby's, 1889.
- (14) Coin collecting in Northern India. C. J. Rodgers, Allahabad, 1894, p. 48.
- (15) List of Indian Coins collected by the late Pandit Ratan Narain, Sheriff, Adalat of Delhi. Lahore: printed at the New Imperial Press, by Sayyad Rajab Ali Shah, 1888.

R. B. WHITEHEAD.



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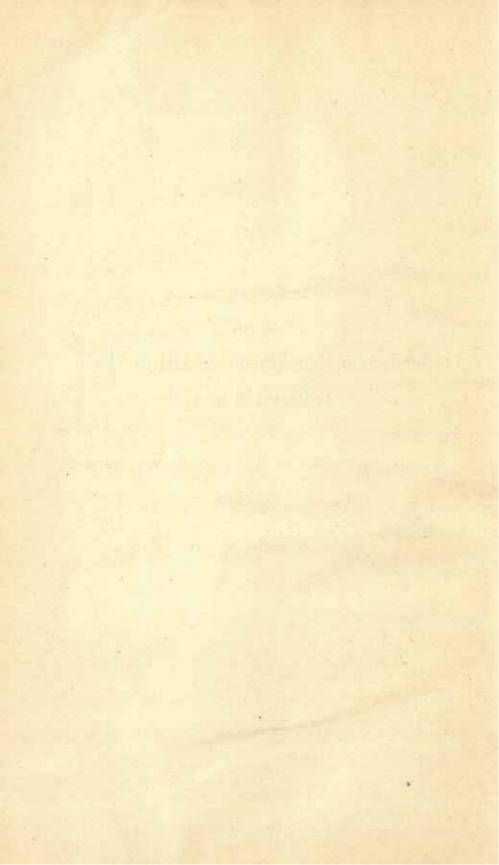
Numismatic Supplements XXXIII to XLVII (Articles 200 to 350)

IN THE

JOURNAL OF THE ROYAL ASIATIC SOCIETY OF BENGAL

1919-1938

By C. R. SINGHAL



PART I

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and Gyani, R. G. A Resumé of Numismatic Research
in India, XLVII (341) (Silver

Jubilee Number), 1937-38.

ALTEKAR, A. S. Two new Andhra Coins, XLVI (330) 1935-36.
Note on an alleged Coin of Rudrasena, XLVI (331)
1935-36.

The attribution of the Chandragupta-Kumāradevī type, XLVII (346) (Silver Jubilee Number), 1937-38.

ANTĀNI, R. M. Coins exhibited at the Annual Meeting of the Numismatic Society of India held at Agra on January 2, 1927, XL (265) 1926-27.

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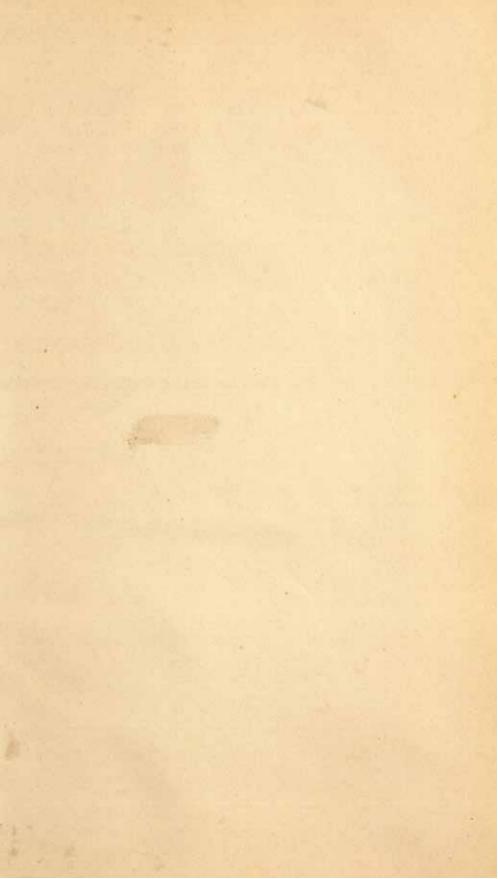
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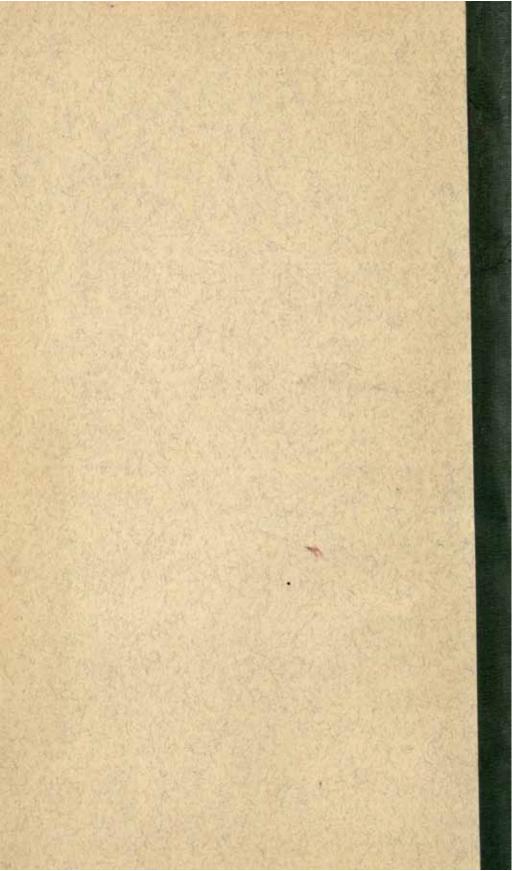
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